ZIONS BANK®
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MUNICIPAL CONSULTING

North Tooele County Fire District

August 2013

Impact Fee Analysis

Message from the Chief

Addressed to the:

Administrative Control Board

North Tooele County Fire District

179 Country Club, Stansbury Park, UT 84074

Dear Board Members,

I am proud to provide this Capital Facilities Plan before you for your review and adoption. The District staff and personnel from Zions Bank have worked hard to get this study completed in a timely manner and to provide the most detailed and up-to-date information for your consideration.

This study will lay out the impact fee structure and rate for the next several years and will also discuss critical infrastructure needs to complete the mission of the Fire District.
We feel like the rates and fees are defensible to the public, land developers, builders and County staff that may have an interest in the materials covered in this study.

Thank you for all you do for the District.

Randy Willden

North Tooele County Fire District Chief

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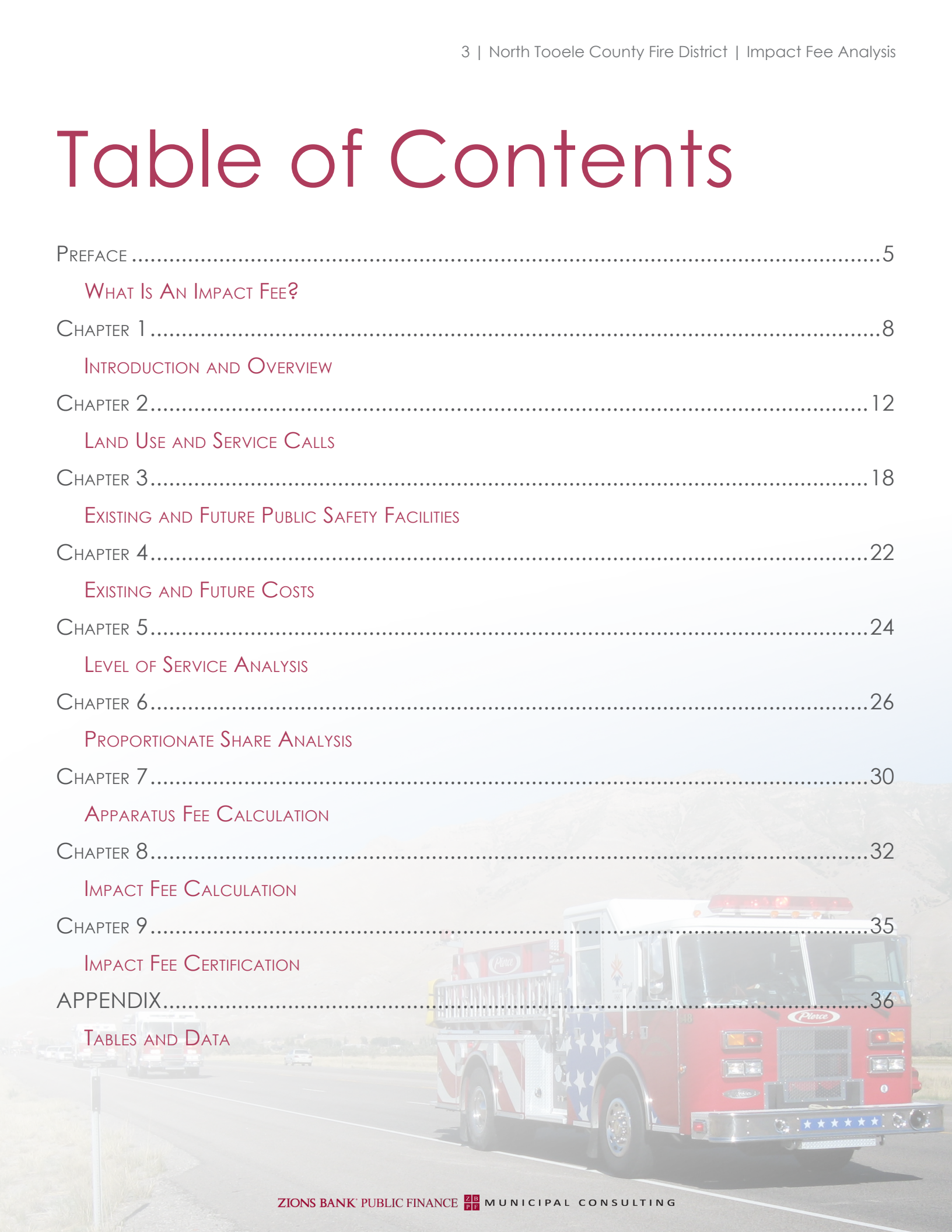
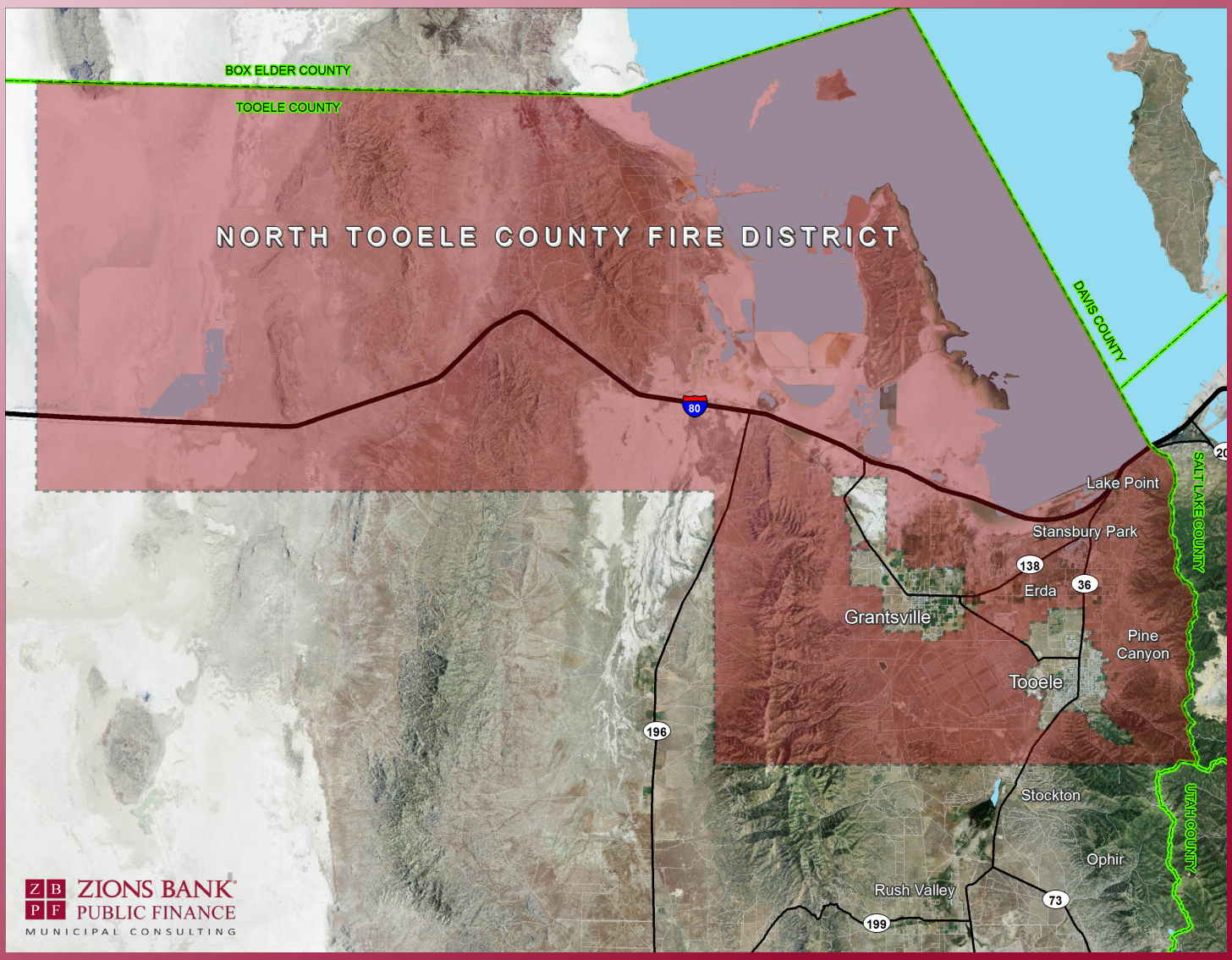




North Tooele County Fire District boundaries

NTCFD firefighters in action

4

Number of Existing Stations

815

Average Total Annual Fire Calls

14,386

Estimated 2013 District Population

Preface

WHAT IS AN IMPACT FEE?

An impact fee is a fee, not a tax, that is imposed by a local government on a new or proposed development project to pay for all or a portion of the costs of providing public services to the new development. Impact fees collected for fire protection and EMS services provide funding for essential public safety infrastructure needed by the North Tooele County Fire District to handle the increase in calls that new growth will create.

Impact fees are a common and equitable way to share the costs of infrastructure between existing and future residents. According to a survey completed in 2012, 28 states actively employ impact fees as a method of funding.[1] Utah adopted its first impact fee legislation into the Utah Code in 1995, with its most recent update in 2011 with the Recodified Impact Fees Act.

WHY IMPACT FEES?

Without impact fees, new development may not pay its fair share of the infrastructure built to support its existence. This would arguably require existing residents to pay for facilities and services that may only be needed by new development.

Utilizing impact fees to pay a portion of the costs associated with future infrastructure puts future users on an equal footing with existing users—who have been paying property taxes, sales taxes, user fees and/or other revenue sources in order to generate the revenue required to provide needed services.

The recommended impact fee structure presented in this analysis has been prepared to satisfy Utah State Code Title 11, Chapter 36, Sections 1-5 (the Impact Fees Act). To ensure sufficient and proper funding, the North Tooele County Fire District (the District) has retained the Municipal Consulting Group of Zions Bank Public Finance (ZBPF, Zions) to evaluate and calculate the maximum equitable impact fee the District may assess in compliance with the Impact Fees Act.

Without impact fees, new development may not pay its fair share of the infrastructure built to support its existence.

WHY IS THIS UPDATE NEEDED?

The District originally began collecting Impact Fees in July of 1997. An analysis was completed that year to calculate the amount of the fee and was titled "Public Safety Facilities Capital Facilities Plan and Impact Fee Methodology." This current study is an update of the 1997 analysis and contains all the calculations and documentation required by the State of Utah in order for the District to legally assess and impose a new impact fee.

The District has commissioned this Public Safety Impact Fee Analysis (IFA) to accomplish the following:

1. Ensure that the fire and the emergency medical service (EMS) facilities within the District's Impact Fee Service Area (Service Area) are appropriately funded by existing and future recipients of public safety services.

2. Update financial projections and the cost of facilities to reflect the most up to date information available.

3. Put the analysis in compliance with the latest changes to the Impact Fees Act effective May 2011.

4. Base impact fees upon an Impact Fee Facilities Plan (IFFP) with a six to ten year capital planning horizon and address the historic cost of facilities where applicable.

5. More clearly define the current and

1 "National Impact Fee Survey: 2012" completed by Duncan Associates

The Stansbury Park Station is the North Tooele County Fire District's newest facility

future level of service that the District will provide, ensuring that the current level of service is not exceeded with funds collected from impact fees.

EFFECT OF NEW GROWTH

A network of fire protection and EMS services are required to ensure that the majority of development within the service area receives a first responder response time which adequately protects life and property.

New growth adds pressure to the fire and EMS services by increasing the call volume. As the amount and density of development increases—particularly in areas further and further away from the center—emergency resources are strained. This increases the amount of crews and apparatus needed which in turn requires additional and/or expanded facilities.

A new fire station is often built well ahead of the growth it will ultimately serve to ensure response times are met even when the current development within the service area is sparse. As growth occurs within the service area and development becomes denser, stations with latent or reserved capacity will respond to more and more calls until either development reaches its full potential or an additional station is needed.

Until development reaches its maximum density there is a reserve capacity in the network of stations that can still be used to serve new growth. The general impact fee methodology designates a percentage of all stations which benefit existing development and another percentage to serve new growth.

The cost of the percentage of stations that can serve new growth is calculated based upon the historic cost of existing stations and the future cost of building new stations—which is then divided by the number of additional calls which new development will add. A final fee based on specific land use categories is then calculated by multiplying the cost per call by the number of calls that each type of development typically generates (according to local dispatch records).

WHAT COSTS ARE INCLUDED?

The public safety services considered in this analysis are the capital costs associated with providing fire protection and EMS services. The impact fees proposed in the Impact Fee Analysis are calculated based upon following:

1. Construction of new facilities or expansion of existing facilities required to maintain (but not exceed) the existing level of service; only those expected to be built within ten years are considered in the final calculations of the impact fee.

2. Interest costs related to existing and future debt; including apparatuses in the inventory and expected to be added within ten years.

3. Historic costs of existing facilities that will serve new development.

4. Cost of professional services for engineering, planning, and preparation of the impact fee facilities plan and impact fee analysis.

WHAT'S NOT INCLUDED?

The following items are not included in this analysis:

1. Operational and maintenance costs.

2. Cost of facilities constructed beyond ten years.

3. Cost of facilities funded by grants or other funds which the District is not required to repay.

4. Cost of renovating or reconstructing facilities which do not provide new capacity or needed enhancement of services to future development.

It should also be noted that this analysis does not directly consider public safety services which are provided for areas outside of the District. These services are provided based on mutual aid agreements or are funded through service agreements where the entity receiving the benefit pays a service charge. Therefore, the extra cost associated with this service is defrayed and does not need to be included in the impact fee analysis.

The one major exception to the point above are the emergency calls related to Interstate 80. Although the District has a responsibility to service the Interstate, a large portion of these calls are from non residents of the District.

Since new development arguably has little or no relation to calls originating from the Interstate, the impact of these calls has been calculated and excluded from the fee.

WHERE WILL THE FEES APPLY?

The proposed impact fees will be assessed throughout the entire Service Area. The established Service Area includes all areas within the current North Tooele County Fire District boundaries as represented on page 4.

WHAT'S THE NEW FEE?

The impact fees have been calculated with all the previous considerations. The table below contains the current impact fee assessment. The cost per call, calls per unit, and fee per unit have been calculated for single family, multi-family, and private non-residential land uses.

The fees proposed in this table represent the maximum impact fee that the District may assess new development. Currently, the District has contracted with Tooele County to collect fire and EMS impact fees at the time of application for a building permit. Therefore, the impact fees are paid to the County and then transferred to the District. While this is the current practice, the District may decide in the future to collect the fees independently.

ASSESSING UNIQUE PROJECTS?

Occasionally a private project is constructed which has a unique impact on the community and does not easily fit into any of the major land use categories used in the first table to assess impact fees. In addition, a private project may fit into one of the land use categories listed below but may have an unusually high or low number of anticipated calls.

The District reserves the right under the Utah Impact Fees Act to assess an adjusted fee that more closely matches the true impact that a unique project may have upon fire and EMS facilities.

To determine the impact fee for a non-standard use, the formula presented in the second table below should be employed. In order to estimate the number of annual calls to be created, where possible call data may be used from the District or from nearby locations that have a comparable project to the one being proposed.

WHAT WAS THE PREVIOUS FEE?

The final table below presents the previous fee as calculated in the previous impact fee analysis. The previous fee included an adjustment which equaled the present value of estimated average past contributions that had been made and future contributions which may be made by each new equivalent residential unit towards the funding of District Facilities. This methodology was not used in the current study, due to the reasoning that property owners still receive a benefit from property taxes levied on undeveloped parcels.

Recommended Fire & EMS Impact Fees Per Unit

FIRE / EMS	Cost per Call	Calls per Unit	Fee per Unit
Residential			
Single Family Residential Unit	$4,909.05	0.0837	$411.08
Multiple Family Residential Unit	$4,909.05	0.1139	$559.24
Non Residential			
Private Non Residential (kSF)	$4,909.05	0.0282	$138.47
Apparatus Fee for Private Non Residential (kSF) *	$1,366.65	0.0282	$38.55

Note: Minor discrepancies in this and other tables are due to rounding

**Apparatus Fee is charged to non residential only*

Non Standard Development Fire & EMS Impact Fee Calculation

FIRE / EMS Cost Per Call		Unique Project		Assessment
$4,909.05	x	# of Annual Calls Projected to be Created	=	Customized Impact Fee

Previous Fee from 1997 IFA

	Unadjusted Fee	Adjusted Fee*
Residential Unit	$835.94	$672.83
Non Residential Unit (kSF)	$557.29	$448.55

**The fee adjustment was based on a methodology which refunded building fee applicants based on averaged previous property taxes paid*

Low level aerial view of the northeast part of the District

Chapter 1

INTRODUCTION AND OVERVIEW

A special service district was established on October 6, 1987, known as North Tooele County Fire Protection Service District, also known as the North Tooele County Fire District.

Covering a 1,700 square-mile area, the District serves a 2013 estimated population of approximately 14,386 people. In 1992 the District began operating at a First Responder level and has since upgraded to an Advanced EMT (AEMT) level of service with many of its forty plus volunteers being certified not only as firefighters but also as emergency medical technicians (EMTs).

The communities of Pine Canyon, Erda, Stansbury Park and Lake Point—as well as other large areas of northern unincorporated Tooele County—are served by four stations located within the North Tooele County Fire District. The four stations house 16 response vehicles and two Haz-Mat Decontamination trailers.

LAND USE AND SERVICE CALLS

Every location in Utah is different in its natural form as well as its built environment, thus requiring a tailored approach to emergency management. Fire and EMS coverage provided by the District is based on existing development and future anticipated growth, as well as special conditions presented by North Tooele County's physical environment. Understanding these demands placed on the District is essential to calculating a fair and equitable fee.

Land Use

In this study, residential development will be divided into two categories: single family and multi-family. While North Tooele County is still predominately made up of single family homes, multi family units are a growing development type. Dividing the impact fee will allow for a more fair equitable assessment of impact fees. Details on existing and future residential and non-residential development are contained in Chapter Two.

Service Calls

Currently the District has a three year average of 815 total fire and EMS calls per year, 435 of which have been desig-

nated as private calls. In the future, it is anticipated that 1,666 additional private fire and EMS calls will be added to the District's call load, with a total anticipated call volume of nearly 3,500 calls in 2060. Greater detail on the number of calls to specific land uses is contained in Chapter 2.

What are Private Calls?

Private calls are those which are made to private land uses, such as residences, businesses, churches, factories, etc. Public calls are those which are made to public land uses such as public land, parks or roads. Generally, impact fees are calculated by separating private calls from public calls and assessing impact fees to private development based on the number of private calls each land use generates.

Although schools may be considered public, the Utah Impact Fees Act does allow certain municipal utilities and services to levy an impact fee on both private and public schools. The North Tooele County Fire District reserves the right to assess all schools an impact fee for fire and EMS services.

Important Consideration: While future facility plans have been estimated based on location and/or currently projected needs, flexibility must be allowed in the actual implementation of plans. The priority of this study is to plan for additional square footage and outline an equitable method for future development to pay its fair share. Final plans on where or how the additional facilities are to be constructed is not the function of this analysis. If final plans differ, this analysis will be updated periodically to ensure that the most up to date information is used to calculate fair and accurate impact fees.

Calls to the Interstate

The number of calls originating on Interstate 80 (I-80) have been estimated and excluded from the impact fee calculation. Calls from I-80 have been dealt with individually in order to demonstrate thoroughness and to address the concern that these calls may grow at a disproportionate rate and be unrelated to new private development in the District.

EXISTING AND FUTURE FACILITIES

The number and type of existing and future facilities needed for fire and EMS coverage in the District has been catalogued. Currently, the District maintains four fire stations. In order to maintain adequate coverage and protection in the future, additional facilities will be needed. Details on these future facilities is provided in Chapter 3.

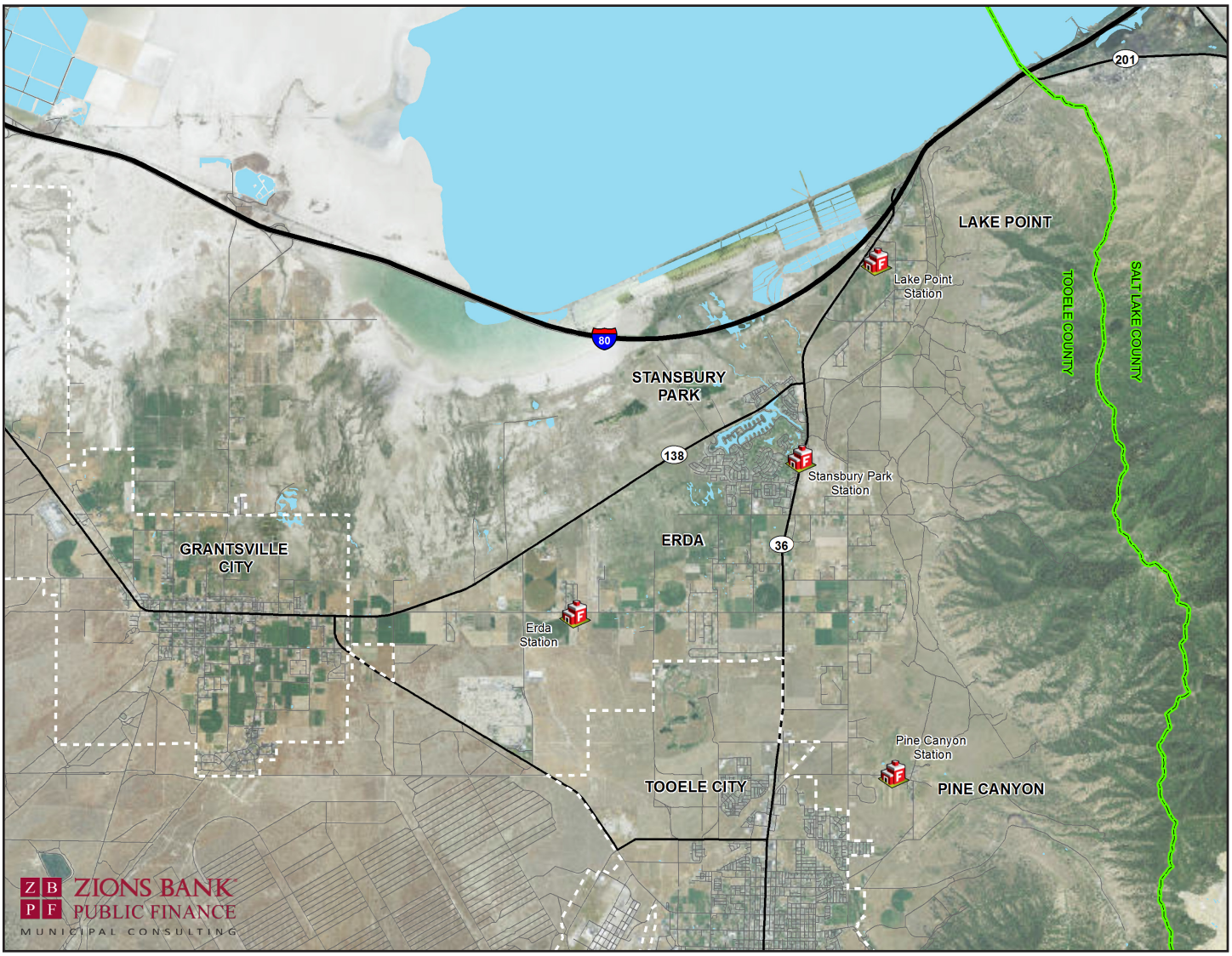
EXISTING AND FUTURE COSTS

The costs associated with the existing and future public safety facilities have been calculated and are contained in Chapters 3 and 4.

Although facilities needed outside of ten years are addressed, only the infrastructure added within ten years will be directly considered in the impact fee calculation.

A NTCFD volunteer assists a motorist in need

The District's four stations are located in the more urbanized part of the service area



LEVEL OF SERVICE

The Impact Fees Act specifically prohibits the use of impact fees to cure existing deficiencies in infrastructure or to construct infrastructure that provides a level of service per user that is higher than the existing level of service.

Furthermore, impact fees cannot be used to maintain a level of service for current system users by funding the repair and/or replacement of existing facilities. The historic and projected level of service for public safety services in the District is based upon floor space already constructed within the boundaries. This floor space is tied to the number of calls in each land use category. This provides a level of service which can be used in evaluating whether or not future, planned infrastructure in the District is in compliance with the Impact Fees Act.

It should be noted that this level of service calculation is separate from the service standard goals which the District is aiming to reach—especially in regards to fire and EMS response times. When it comes to protecting property and especially life, zero loss would be the ideal goal. However, constraints of resources make it impossible to locate a fire station on every corner. Therefore, decisions must be made to enable the best protection possible under the constraint of limited funds.

It is the goal of the District to respond to at least 90% of fire and EMS calls within four minutes. This four minute response time standard has been adopted from NFPA 1710. Details on the coverage and service goals of District can be found in greater detail in the Impact Fee Facilities Plan.

PROPORTIONATE SHARE

As part of this analysis, the Utah Impact Fees Act requires that the calculated impact fee be roughly proportionate and reasonably related to the impact caused by the development activity. Ideally, implementing an impact fee to pay for needed infrastructure places a burden on future users that is equal to the burden that was borne in the past

by existing users (Utah Impact Fees Act, 11-36a-304(2) (c) (d)).

When completing a Proportionate Share Analysis the following points should be considered:

1. The cost of existing and future public facilities.

2. The type of financing for existing and future public facilities.

3. Current and future levels of service.

4. Determination that impact fees are justifiable.

As stated above, part of the proportionate share analysis is a consideration of the manner of funding for existing public facilities. The District has had the ability to fund infrastructure in the past through the following sources:

1. Property Tax Revenues.

2. Bond Proceeds.

3. Developer Exactions.

4. Impact Fees.

For more details on the methodology and calculation of the proportionate share analysis see Chapter 6.

Existing Infrastructure

The District provided Zions with a list of all District owned assets. An analysis has been completed to calculate the existing capacity able to serve new growth and identify any impact fee qualifying apparatus (i.e. apparatus with a purchase price of $500,000 or greater).

Outstanding and Future Debt

The District has no outstanding bonds which relate to public safety. In regards to future debt, it is the intention of the District to pursue debt financing in order to fund the proposed additional infrastructure to be built within the next ten years. The details of this future debt can be found in Chapter 4.

APPARATUS FEE

The District does not currently maintain any impact fee qualifying apparatus (apparatus which cost over $500,000). However, it is anticipated that one impact fee qualifying apparatus will be added to the fire and EMS service within ten years. Using this information, a fee has been calculated which is only applicable to new non-residential development in the NTCFD. This is consistent with the protocol determined by the Utah Impact Fees Act. The apparatus fee calculation is contained in Chapter 7.

IMPACT FEE CALCULATION

The calculations contained in this analysis have been formulated to allow impact fees to fund 100% of the growth-related portion of facilities identified in the proportionate share analysis. These calculations are contained in Chapter 8.

NTCFD firefighters battling a structure fire

Chapter 2

LAND USE AND SERVICE CALLS

Every location in Utah is different in its natural form as well as its built environment, thus requiring a tailored approach to emergency management. Fire and EMS coverage provided by the District is based on existing development and future anticipated growth, as well as special conditions presented by North Tooele County's physical environment. Understanding these demands placed on the District is essential to calculating a fair and equitable fee.

CURRENT & FUTURE DEVELOPMENT

The estimates of current and future development in the North Tooele County Fire District were determined by using ESRI's GIS (geographic information systems) software, data from the Tooele County Assessor's Office parcel database, data from the US Census & American Factfinder, population projections from the Utah Governor's Office of Planning and Budget (GOPB) and input and data from the Tooele County Planning Department.

The following are a few important assumptions which guided this process:

1. It was assumed that the future development of both residential and non residential uses within the District will occur in a proportionally similar way to existing development. The existing non residential square footage per capita was used to project future non residential development.

2. While the current ratio of single family to multi-family housing units is 93% to 7% respectively, the Tooele County Planning Department estimates that the future ratio would be closer to 85% to 15%.

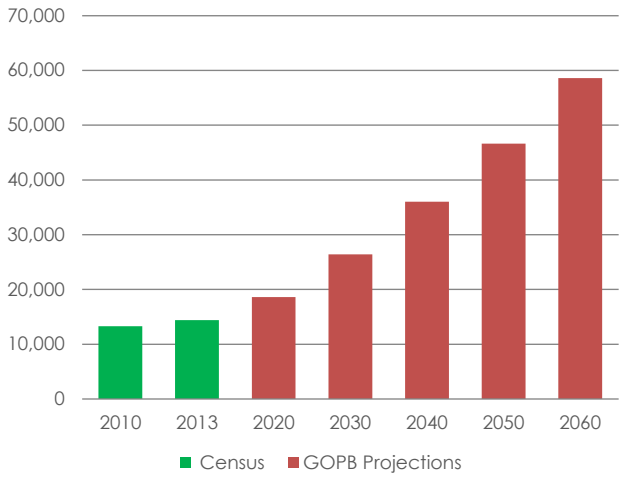
3. For the purposes of this study and for impact fees assessed by or on behalf of the District, only single family detached homes are considered "single family." All others, including condominiums and townhouses are considered "multi-family."

4. A Floor Area Ratio (FAR) of 10% was applied to existing and future estimated acres of non residential development in order to calculate the total square footage of building space.

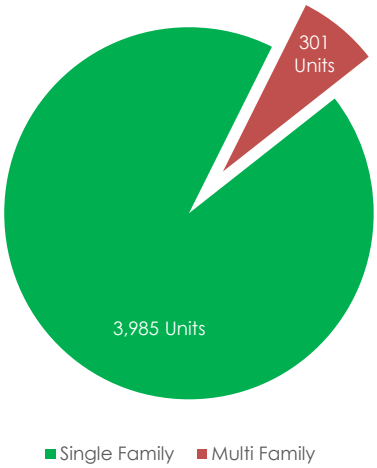
Estimating Existing Land Use

Existing residential uses are based on Census counts and American Fact Finder estimates. Future residential units are based on population projections from the GOPB.

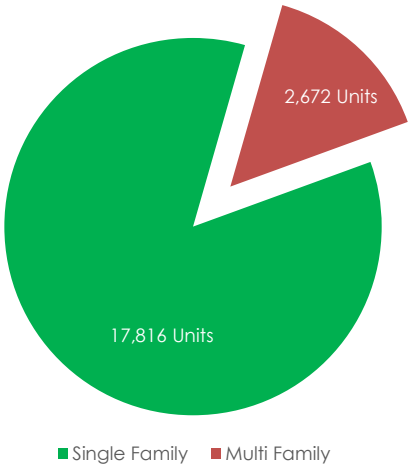
NTCFD Population Projections



Existing Residential Units



2060 Estimate of Residential Units



Land Use

	Existing Development		Future Development to be Added		Existing + Future	
Residential Units	Population	Units	Population	Units*	Population	Units
Single Family	13,374.8	3,984.6	37,579.7	13,831.6	50,954.4	17,816.2
Multi Family	1,011.6	301.4	6,631.7	2,371.1	7,643.3	2,672.5
Total	14,386.4	4,286.0	44,211.4	16,202.7	58,597.7	20,488.7
Non Residential Units	Estimated Acres	kSF	Estimated Acres	kSF**	Estimated Acres	kSF
Private Non Residentia	567.0	2,469.9	1,742.5	7,590.2	2,309.5	10,060.1

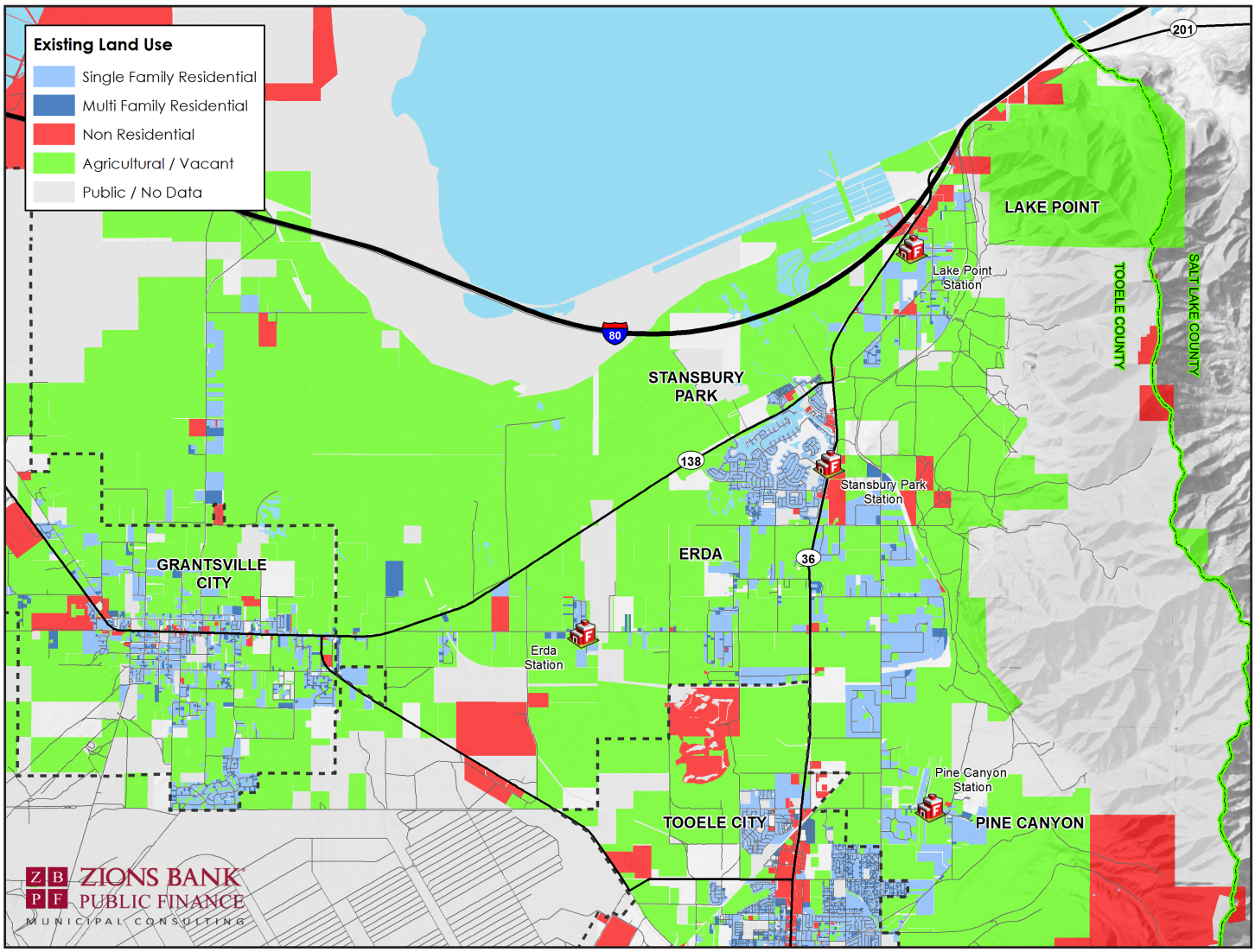
Source: Tooele County Planning Department, North Tooele County Fire District, TCSO Dispatch , Tooele County Assessors, BEBR, US Census, and Zions Bank Public Finance GIS Analysis

**Future units are based on a GOPB 2060 Tooele County persons per household estimate of 2.86*

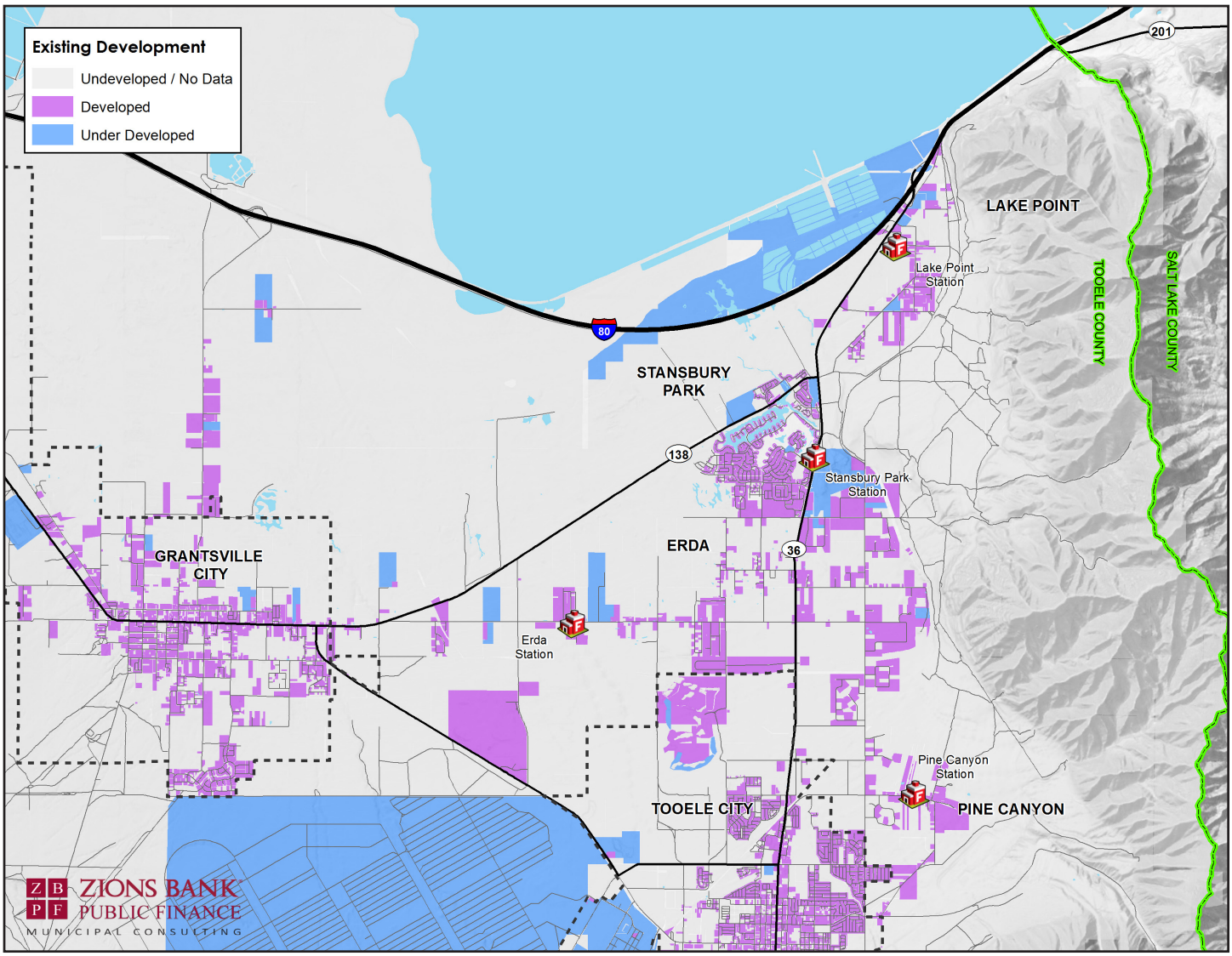
***It is estimated that non residential development will increase at a rate proportionate to the rate of increase seen in population growth*

^Private Non Residential = developed commercial, office, medical, retail, church buildings, industrial buildings, etc; the units are based on a Floor Area Ratio (FAR) of .1

Note: Again, minor discrepancies in this and other tables are due to rounding



Existing non-residential units were estimated using the County Assessor's database and floor area ratios (FAR) reviewed by the Tooele County Planning Department. Residential land uses are measured in dwelling units and non-residential land uses are measured in units of thousand square feet increments (kSF). The table at the top of the page summarizes the results of the land use analysis. These results are depicted in the map above, which



Fire & EMS Calls responded to by the NTCFD from 2010 to 2012

Category	2010	2011	2012	3 yr Total	Average	% of Total
Single Family Residential	312	336	353	1001	334	40.9%
Multi-Family Residential	43	25	35	103	34	4.2%
Private Non Residential	62	50	97	209	70	8.5%
Traffic	104	97	120	321	107	13.1%
Public Land Uses	85	77	109	271	90	11.1%
Total within the District	**606**	**585**	**714**	**1905**	**635**	**77.9%**
Outside of the District	28	23	15	66	22	2.7%
Interstate *	140	149	186	475	158	19.4%
All Calls, All Areas	**774**	**757**	**915**	**2446**	**815**	**100.0%**

** Although the Interstate runs through the District, all emergency calls to the Interstate were accounted for separately*

utilizes the Tooele County Assessor's database and concentrates on the more urbanized part of the District. This representation should be viewed as an approximation employing the best data available.

It should be noted that the existing land use map includes a category denoted as "Agricultural / Vacant." This category includes other land uses but has been designated as such for its primary use by the County Assessor.

The map on the previous page depicts the existing developed, under developed and undeveloped land within the urbanized part of the District. This map should also be viewed as an approximation employing the best data available.

LAND USE AND FUTURE CALLS

Current Call Volume

Statistics on the total current emergency call volume are contained in the table on the previous page.

The data behind this summary was provided by the Tooele County Sherrif's Office (TCSO) Dispatch, which fields every emergency call that comes to the District. This summary displays the information on call volumes and locations needed to determine the calls per unit.

In order to calculate the calls per unit for each land use category, the current average call volume is divided by the total number of current units in each land use category.

The calls per unit figure is then multiplied by the number of future units anticipated in each land use category. This results

Average Historic Calls per Unit to Private Development Types

Development Type	Average 2010 - 2012
Single Family	
Fire & EMS Calls	334
Units	3,985
Single Family Calls per Unit FIRE & EMS	**0.084**
Multi Family	
Fire & EMS Calls	34
Units	301
Multi-Family Residential Calls per Unit FIRE & EMS	**0.114**
Private Non Residential	
Fire & EMS Calls	70
Units (kSF)	2,470
Private Non Residential Calls per Unit FIRE & EMS	**0.028**

Source: Tooele County Sheriff's Office Dispatch , Tooele County Assessors, BEBR, US Census, and ZBPF GIS Analysis

Projected Future Private Fire & EMS Emergency Calls based on Future Units and Call Rate

Projected Future Private Fire / EMS Calls			
Development Type	**Future Units**	**Calls per Unit**	**Projected Future Calls***
Single Family (Units)	13,832	0.084	1,158
Multi Family (Units)	2,371	0.114	270
Private Non Residential (kSF)	7,590	0.028	214
Total Undeveloped Future Private Calls			**1,642**

**Projected Future Calls are based only on future units in addition to existing calls from existing units*

Existing and Future Private Fire & EMS Emgergency Calls

Existing and Future Private Fire / EMS Calls			
Development Type	**Existing (3 yr Avg)**	**Future**	**Existing + Future**
Single Family (Units)	334	1,158	1,492
Multi Family (Units)	34	270	304
Private Non Residential (kSF)	70	214	284
Total	**438**	**1,642**	**2,080**

Interstate Freeway Impact Calculation

Fire & EMS	2010	2011	2012	3 Year Avg	2060*
Total Fire & EMS Calls to the Interstate	140	149	186	158	243
Total Fire & EMS Calls	774	757	915	815	3485
Total Annual Traffic Counts on the Interstate *	4.5 M	4.6 M	5.0 M	4.7 M	7.3 M
Total Interstate Traffic Counts per Call	32,185	30,792	26,776	29,918	29,918
% of Calls that Originate on the Interstate	18.09%	19.68%	20.33%	19.37%	6.98%
% of Calls that Originate on the Interstate Excluding NTCFD Residents **	**16.28%**	**17.71%**	**18.30%**	**17.43%**	**6.28%**

Source: Utah Department of Transportation (UDOT), GOPB, Zions Bank Public Finance

**2011 and 2012 Traffic Counts were based on a trend extrapolated from 2000 to 2010 UDOT data*

***It is estimated that District residents make up 10% of the Interstate traffic volume*

in the number of future service calls to be anticipated by future development.

The tables on the following page depict this calculation by showing the existing average number of calls that went to each land use category, the calls per unit of each land use category, the number of projected future calls, and the number of total calls (existing + future) that are estimated to take place when the District is built out. For the purposes of this study, the GOPB's 2060 population figures were used to calculate both the residential and non residential build out numbers.

To clarify, where the term "Future" is used, this refers to the number of units and calls that will be added in addition to the units and calls that already exist.

Thus, there are three groups of calls being discussed: existing calls—those which existing development are responsible for, future calls—those which future added development will be responsible for, and existing plus future calls—this is the grand total of all calls projected to occur when all of the District's land has been developed.

Emergency Calls to the Interstate

The current and future impact of Interstate 80 (I-80) on the resources of District has been calculated in the tables above. It is assumed that 90% of the traffic volume and emergency calls on I-80 within the District are generated by non residents, and are therefore not related to growth and not applicable to the impact fees.

In order to calculate the future impact and exclude this amount, the number of current calls to I-80 was related to the current traffic volume of I-80. Using Utah Department of Transportation traffic data collected on I-80 within the District from 2000 to 2010, the current traffic volume and trends were measured and projected out to 2060.

With estimated traffic volume on I-80 in 2060—an assumed build out date for District—the number of calls originating from I-80 at build out could then be calculated based on the relationship between historic calls and historic traffic volume.

This amount was then reduced an additional 10% (the assumed amount of I-80 traffic attributable to District residents) and excluded from the proportionate share analysis as shown later in this report. As can be seen in the tables above, the effect of I-80 on emergency call volume is small but still sizeable.

A major accident on Interstate 80

Chapter 3

EXISTING AND FUTURE PUBLIC SAFETY FACILITIES

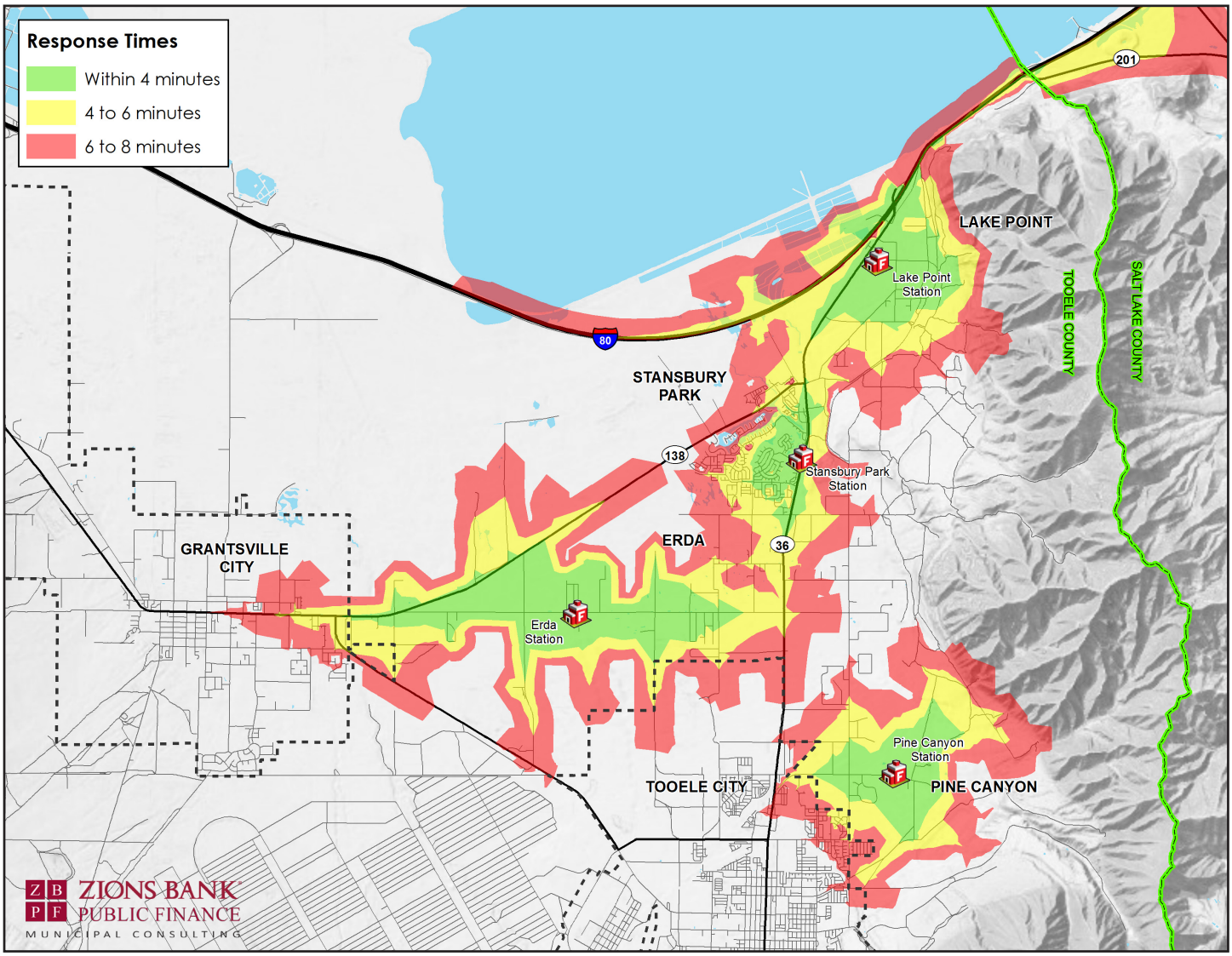
Currently the District utilizes 21,197 square feet in four stations to provide fire and EMS services to its residents. Within the next ten years, the District plans to expand one station and add an additional station.

Summary of Existing Fire & EMS Facilities

Existing Fire / EMS Facilities				
Location	**Year Constructed**	**Acres**	**SF of Space**	**Cost**
Lake Point Station	1994		4,752	$470,000
Lake Point Station Land		1.00	-	$12,139
Stansbury Park Station	2008		9,245	$2,140,941
Stansbury Park Station Land		1.08		$12,000
Pine Canyon Station	1991		2,200	$114,860
Pine Canyon Station Land *		1.10		$0
Erda Station	2003		5,000	$369,422
Erda Station Land		1.00		$35,211
Total		4.18	**21,197**	**$3,154,573**

** Pine Canyon Station land was a gift to the District and therefore cost $0*

NTCFD firefighters respond to a vehicle fire



EXISTING FIRE & EMS COVERAGE

Generally as more homes, businesses, and other types of development are built, the number of emergency calls increase. This increase in call volume affects the fire and EMS services in two major ways. First, much of the newer development comes from undeveloped land that is located further away from the District's current stations. This increases response times—requiring additional time for fire fighters or EMS personnel to reach emergency situations.

Also, as the call volume increases, so does the likelihood that multiple calls will occur at the same moment and compete for emergency services. This also increases the average response time. As explained in the Impact Fee Facilities Plan (IFFP), when response times increase the risk of property damage and loss of life also increases.

New infrastructure must be built to maintain both adequate response times and also to provide adequate space for the additional equipment and emergency vehicles needed to serve a greater volume of emergency calls.

Current Response Times

The map above illustrates the present land area of the District covered within a four, six and eight minute response time from the existing stations. A four minute response time is the generally accepted goal for fire and EMS response times—as discussed in the Impact Fee Facilities Plan.

It should be noted that this analysis was completed using the legal speed limits assigned for each street. While emergency service vehicles are allowed to travel faster than the posted speed limit, in practice these vehicles often average the posted speed. This is due to the reality that emergency service vehicles are larger, heavier and less easy to maneuver than personal vehicles—with slower acceleration speeds. As well, these vehicles often must negotiate traffic and other potential hazards (such as pedestrians in residential zones) which require a relatively slower, safer speed.

When it comes to protecting property and especially life, zero loss would be the ideal goal. However, the constraint of funds and other resources make it impossible to locate a fire station on every corner. Therefore, decisions must

***The District's Goal:** Respond to at least 90% of fire and EMS calls within four minutes.*

be made to enable the best protection possible under the circumstances.

Considering these important points, it is the goal of the District to respond to at least 90% of fire and EMS calls within four minutes. This four minute response time standard has been adopted from NFPA 1710. Details on the coverage and service goals of the District can be found in greater detail in the Impact Fee Facilities Plan.

FUTURE INFRASTRUCTURE

As discussed in Chapter 2, according to the GOPB the 2060 population of the District is projected to be 58,598. Planning for a population this size and the development that will accompany this growth, it is anticipated that three additional stations and one existing station expansion will be needed to provide adequate response times according to National Fire Protection Association (NFPA) 1710, the Insurance Services Organization (ISO) standards (as explained in the IFFP) and the District's goal for coverage. The table below summarizes the needed infrastructure and the projected construction costs.

The maps on the following page demonstrates how these additional stations will provide increased coverage to areas currently not being adequately served.

Future Station Location

It should be noted that the location and timing of these stations may change as District officials judge when and where new development actually occurs—and how the District as a whole would be best served with additional public safety infrastructure.

The purpose of this impact fee analysis is not to make official plans for when and where infrastructure will occur, but to provide a reasonable financial plan in order to charge fair and equitable impact fees.

Understanding Future Coverage

One cause for concern is that the future stations do not appear to add tremendously to the four minute service response goal. This can be explained by two factors. First, the future station coverage can only be projected on present roadways. As future road infrastructure is constructed, the street network will expand. As it does, so will the illustrated coverage—especially

NTCFD Firefighters respond to an accident

near the future west Stansbury Park Station where the current road network to the west is minimal.

Secondly, where the first initial station in the District provided coverage where there previously was none, any additional station located nearby provides only marginal coverage. A portion of the new coverage overlaps with the existing coverage.

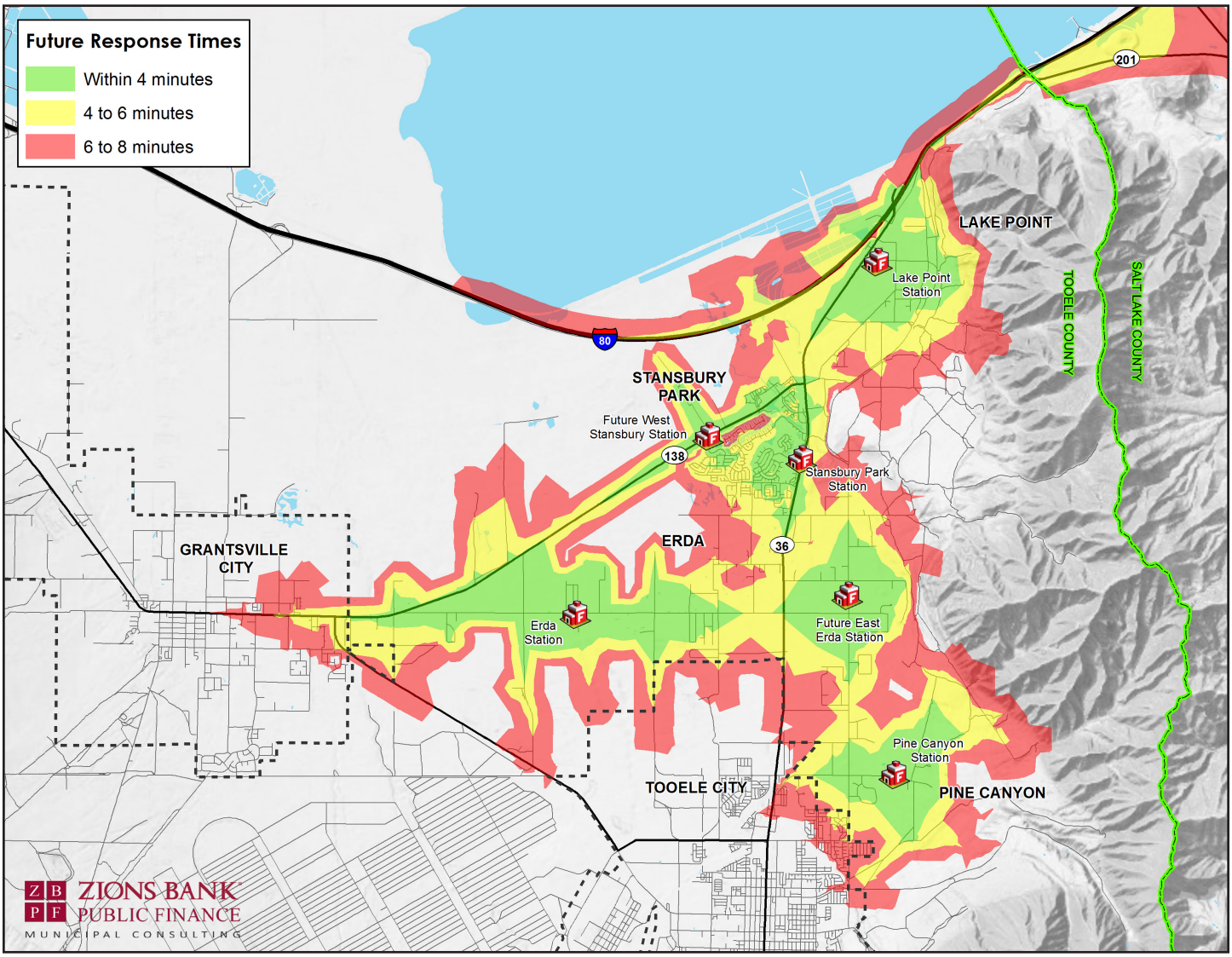
Again, it is important to note that while future facility plans have been estimated based on location and/or currently projected needs, flexibility must be allowed in the actual implementation of plans. As was stated previously, the priority of this study is to outline an equitable method for future development to pay its fair share. Creating final plans on where or how the additional facilities are to be constructed is not the function of this analysis. Where other future plans may differ, this analysis will be updated periodically to ensure that the most accurate and up to date information is used to calculate fair and equitable impact fees.

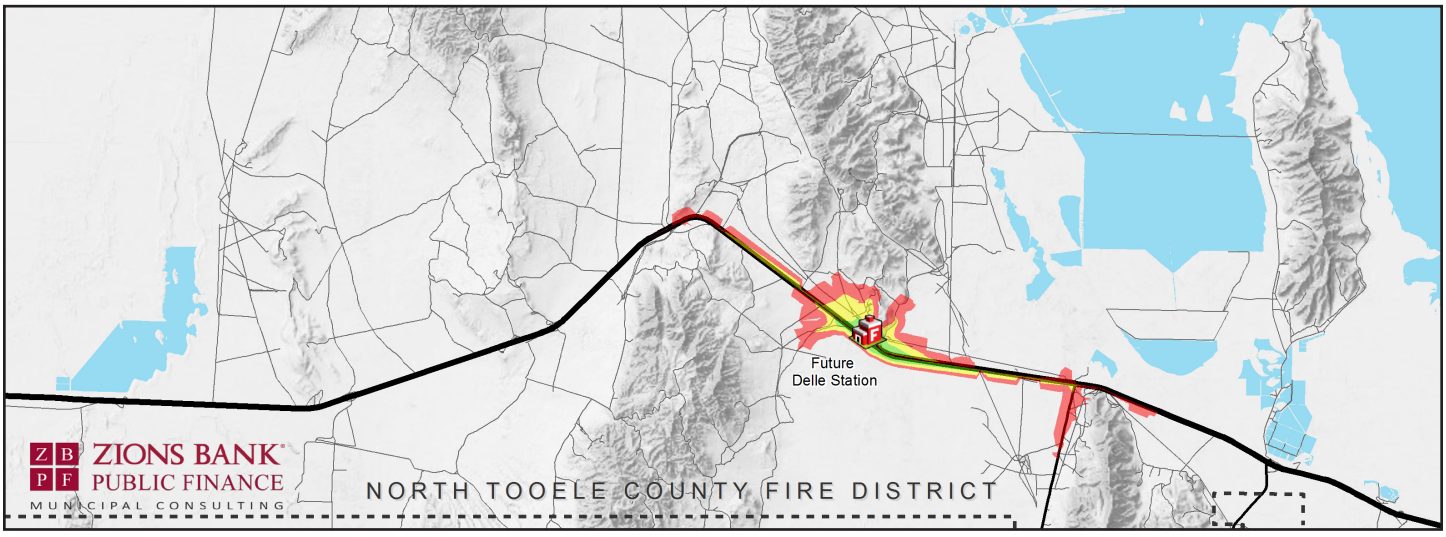
Projection of Future Fire & EMS Facilities

Project	Construction Year	Floor Space (SF)	Land (Acres)	PV Project Expense $	Construction Year Expense*
Future Fire / EMS Facilities					
East Erda Station Land (Droubay Rd and Arrowhead Ln) **	2013	-	2.50	$0	$0
East Erda Station	2018	9,000	-	$1,507,500	$1,700,031
Lake Point Station Expansion	2020	6,000	-	$1,005,000	$1,189,174
West Stansbury Park Station Land	2024	-	2.00	$119,311	$155,425
West Stansbury Park Station	2025	9,000	-	$1,507,500	$2,011,574
Delle Station Land	2029	-	1.00	$59,656	$87,638
Delle Station	2030	9,000	-	$1,507,500	$2,268,483
Within 10 Years		15,000	2.50	$2,512,500	$2,889,205
Total Future Fire / EMS Facilities		33,000	5.50	$5,706,467	$7,412,324

**Construction year expenses are based on BLS 10 year average inflation rates (2002 to 2012)*

*** The land for the East Erda Station is in the process of being gifted to the District*


Future Response Times
Within 4 minutes
4 to 6 minutes
6 to 8 minutes
LAKE POINT
Lake Point Station
TOOELE COUNTY
SALT LAKE COUNTY
STANSBURY PARK
Future West Stansbury Station
Stansbury Park Station
GRANTSVILLE CITY
ERDA
Erda Station
Future East Erda Station
Pine Canyon Station
TOOELE CITY
PINE CANYON
80
201
138
36
ZIONS BANK PUBLIC FINANCE
MUNICIPAL CONSULTING


Future Delle Station
ZIONS BANK PUBLIC FINANCE
MUNICIPAL CONSULTING
NORTH TOOELE COUNTY FIRE DISTRICT

Chapter 4

EXISTING AND FUTURE COSTS

The previous chapter discussed the future infrastructure needed in order to provide adequate coverage for new development. This chapter addresses the financial status of the North Tooele County Fire District and focuses on the anticipated costs associated with providing future facilities.

OUTSTANDING DEBT

The District presently has no outstanding bonds which relate to public safety. The District is currently debt free.

FUTURE COSTS

It is the intention of the District to pursue debt financing in order to fund the projects to be constructed within the next ten years.

The tables to the right present the figures used to estimate the land and construction costs of future capital facilities.

Estimated Future Land Costs

The cost of land in northern Tooele County was estimated by averaging the last several sales of vacant lots within the area. These are lots comparable in size and character to what would be utilized by the District for a future fire station. Their individual locations are not as important as is their combined average cost per acre.

Currently, the average estimated cost of an acre of land in northern Tooele County is $59,656. This represents the most up to date estimate of the true cost of purchasing land in the area.

Estimated Construction Costs

The estimated cost of construction for projects to be completed in the future is based on station size requirements from the District and estimates from the industry on the site and construction cost per square foot.

The table below details the SF cost estimate used in the calculation of construction year costs for future fire and EMS projects. This is a conservative estimate for a facility constructed with adequate, but not ornate, materials and design.

Future Inflation

The Impact Fees Act allows for the inclusion of a time price differential to ensure that the costs incurred at a later date are accurately calculated.

Depending on the anticipated construction year, land and construction costs have been inflated at 2.4% annually (the ten year Bureau of Labor Statistics average) to account for the increasing cost of labor and materials with time. This inflated figure was used to calculate the amount of future debt planned to be issued in for each project.

Fire & EMS Station Cost Estimate

Fire Station, Face Brick Concrete Block Back-up / Bearing Walls	
Cost Estimate (Open Shop)	**Cost per SF**
SubTotal	$124.12
Contractor Fees (GC, Overhead, Profit)	31.00
Architectural Fees	12.38
User Fees	0.00
Total Building Cost	**$167.50**

Source: Based on 2012 RS Means CostWorks Data; Utah Region; 1-story 4,000 SF facility

Cost per Acre of Land Estimate

Address	Area	Acres	Sale Date	Sale Price	Price / Acre
1255 E SPRING CANYON RD	Erda	4.71	4/26/2013	124,900	$26,518
4570 ALAN LN	Erda	1.02	3/29/2013	77,000	75,490
3887 N ROSE SPRINGS RD	Erda	1.00	3/20/2013	76,216	76,216
3847 N ROSE SPRINGS RD	Erda	1.00	3/20/2013	89,900	89,900
25 N SAGE LN	Lake Point	5.08	12/22/2012	$200,000	39,370
7185 N RIDGE RD	Lake Point	1.00	12/18/2012	83,500	83,500
3176 N BRONZEWOOD CIR	Erda	4.70	7/25/2012	125,000	26,596
Average					**$59,656**

Source: Utah MLS, Local Realtor: George Snideman, Real Estate Broker

Projection of Future Fire & EMS Facilities

Project	Construction Year	Floor Space (SF)	Land (Acres)	PV Project Expense $	Construction Year Expense*
Future Fire / EMS Facilities					
East Erda Station Land (Droubay Rd and Arrowhead Ln) **	2013	-	2.50	$0	$0
East Erda Station	2018	9,000	-	$1,507,500	$1,700,031
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Total Future Fire / EMS Facilities		33,000	5.50	$5,706,467	$7,412,324

*Construction year expenses are based on BLS 10 year average inflation rates (2002 to 2012)

** The land for the East Erda Station is in the process of being gifted to the District

Sources of Anticipated Funding

Project	State or Federal	% Funded	Other Non Impact Fee Qualifying	% Funded	District	% Funded
Delle Station						
East Erda Station	-	0%	-	0%	$2,488,013	100%
Lake Point Station Expansion	-	0%	-	0%	$1,740,368	100%
Future Fire / EMS Facilities within 10 Years	-	0%	-	0%	$4,228,381	100%

*Future Bond Financing Costs were calculated using a 3.5% coupon and include a 4% cost of issuance

Recommended Financing of Future Facilities to be Built within 10 Years

Project	Construction Year Expense	Future Bond Financing Costs*	Total	Impact Fee Qualifying
Future Fire / EMS Facilities				
East Erda Station	$1,700,031	$787,982	$2,488,013	$2,488,013
Lake Point Station Expansion	$1,189,174	$551,194	$1,740,368	$1,740,368
Future Fire / EMS Facilities within 10 Years	$2,889,205	$1,339,176	$4,228,381	$4,228,381

Estimated Future Debt Service

The appendix contains the detailed debt service schedules which project the year by year costs associated with debt financing the future fire and EMS infrastructure to be constructed within ten years.

The input figure used for the principal amount is the construction year cost of the project—which is the present value cost of the project inflated 2.4% annually to the year of anticipated construction.

In addition, in order to accurately estimate the cost of this debt, a few assumptions were made, including an interest rate at 3.5%, and a cost of issuance of 4% (which includes the expenses associated with the sale of a new issue of municipal securities).

The entire amount of these issued debts will be included in the impact fee calculation as it represents the best estimate of the entire cost associated with each future project.

TEN YEAR HORIZON

The tables above detail the project expenses for the infrastructure required to meet the needs of the projected growth discussed in Chapter 2. The first table presents all future anticipated projects and corresponds with the table previously exhibited in the Chapter 3. The second table focuses on the projects planned for the next ten years and includes the costs associated with debt financing.

Only infrastructure to be constructed within the next ten years is directly considered in the calculation of the District's public safety impact fees.

It can be argued that projects beyond ten years are too far away to be calculated accurately, owing to the large uncertainty surrounding events that far into the future. Thus, this impact fee analysis focuses instead on the costs and capacity of the projects which are planned for relatively immediate future.

As is illustrated in the second table, it is not anticipated that any other sources of funding will contribute to these projects besides the funds collected from the existing and future residents of the District.

The final column on the right of the second table details the amount of each project within the ten year time frame that is impact fee qualifying and will contribute to the calculation of the impact fees to be paid by future development.

NTCFD fire suppression vehicles awaiting an emergency call

Chapter 5

LEVEL OF SERVICE ANALYSIS

According to State statute, impact fees cannot be used to correct deficiencies in the system or increase the level of service (LOS) over what currently exists. One way to determine if the level of service has been exceeded is to measure the current square footage of public safety infrastructure per emergency call and compare it to what is planned for the future. This analysis has been completed and is contained in this chapter.

THE CHALLENGE

The challenge with public safety infrastructure is that it cannot be added piece by piece, or pipe by pipe as in a public water system for example, but must be added station by station.

In other words, if call volume increases by 5%, the infrastructure cannot simply be increased by 5%. When new infrastructure is needed to serve a new area of the District—even if the overall call volume of that area is low—the District is justified in building infrastructure to serve areas in need.

However, if stations are being built well ahead of growth in some situations, how do we know that the level of service is not being exceeded and that the State statute is being adhered to. If the method for analyzing the level of service is a simple calculation of existing calls or people per station, then the District may not be justified in using impact fees to

Important Consideration: The District may decide to enhance the future planned level of service (beyond what is planned in this impact fee analysis) to better meet the guidelines from the NFPA and ISO discussed in chapter 1 of the IFFP. If by doing so the current level of service is exceeded, then the District is fully aware that it will need to fund that enhancement with revenue sources other than impact fees.

pay for new stations—even if those new stations are required for new development to be built.

THE SOLUTION

When public safety infrastructure is planned and constructed, the way it impacts the LOS must not be viewed in terms of the call volume or population it currently serves, but the total call volume it was built to serve.

With this perspective the question of whether or not a new public safety facility exceeds the District's current level of service deals less with the immediate future and more with the overall system plan through build out.

In other words, is a station (or stations) being built to serve only a few people throughout its useful life? Or—*as development continues into the future and the station reaches it's full capacity*—will that station (or stations) serve the same or more calls and people as the existing stations do? This is the right question to ask and the correct perspective to have when assessing the level of service for public safety infrastructure.

THE CURRENT AND FUTURE LOS

The current and future LOS to be maintained for fire and EMS service in the District is displayed in the table and graph below.

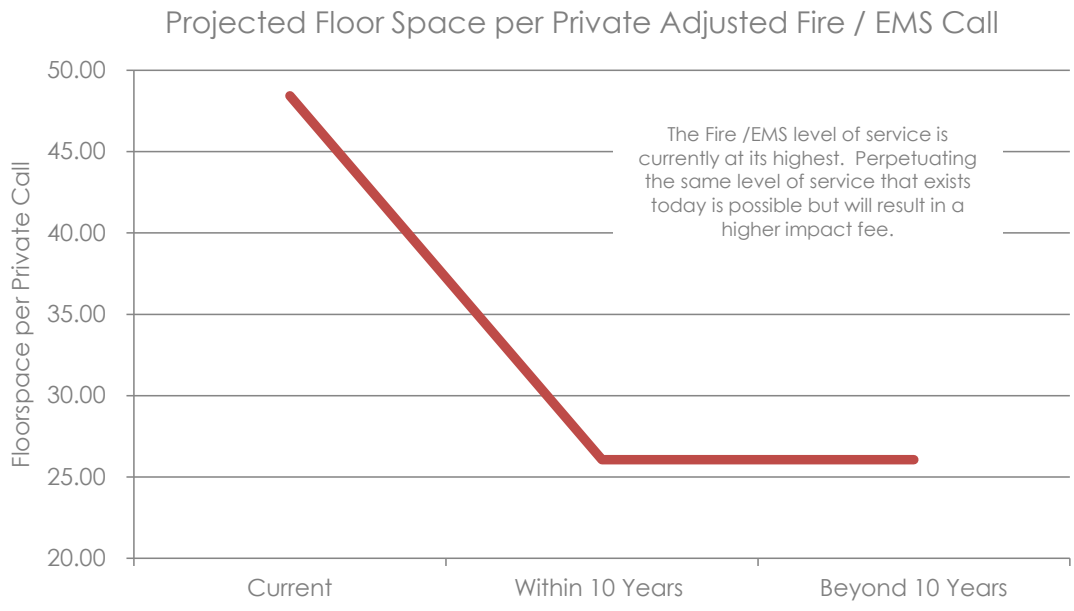
As can be seen, the level of service is decreasing significantly. This demonstrates that new stations being planned for the future will not exceed the current level of service but will serve a larger number of people as development within the District continues.

Details on the number of existing and future buildings and the amount of associated floor space can be found in Chapter 3. Details on the current and future expected emergency call volumes was presented in Chapter 2.

Level of Service based on Floor Space per Private Emergency Call

Time Frame	Floor Space Added	Total Floor Space	Total Private Calls to be Served*	SF per Call
Current	-	21,197	438	48.432
Within 10 Years	15,000	36,197	1,389	26.055
Beyond 10 Years	18,000	54,197	2,080	26.055

**Current is based on current average served, all others are based on total capacity that will be served*



Chapter 6

PROPORTIONATE SHARE ANALYSIS

The Utah Impact Fees Act requires that the calculated impact fee be roughly proportionate and reasonably related to the impact caused by the development activity. Ideally, implementing an impact fee to pay for needed infrastructure places a burden on future users that is equal to the burden that was borne in the past by existing users (Utah Impact Fees Act, 11-36a-304(2) (c) (d)).

CALCULATION OF PROPORTIONATE SHARE

An equity buy-in can be calculated to recover the value of existing capital projects that still have significant capacity to serve now growth. The tables below display the current and future facility floor space and the calls that each will serve. With this information it is possible to calculate the percentage that will serve new growth, and thus the portion that future growth will be expected to fund. Realistically, all stations will serve existing and future growth once completed. However, the following tables are meant to show the overall capacity that future stations add and how that capacity will be accounted for and apportioned.

Summary of Fire & EMS Facilities

Time Frame	Added Station Floorspace	% of Buildout Floor Space	Calls Served by this Infrastructure	Current Avg. Calls Served by this Infrastructure	Future Calls to be Added	% to Serve Future Growth
Existing	21,197	39.1%	814	438	376	46.2%
Within 10 Years	15,000	27.7%	576	0	576	100.0%
Beyond 10 Years	18,000	33.2%	691	0	691	100.0%
Existing and Within 10 Years	**36,197**	**66.8%**	**1,389**	**438**	**952**	**68.5%**
At Buildout	**54,197**	**100.0%**	**2,080**	**438**	**1,642**	**79.0%**

Proportionate Share of Fire & EMS Facilities

Time Frame*	Impact Fee Qualifying Cost of Facilities	% of Cost allocated to Future Development	Interstate Traffic Reduction**	% of Cost to Future Development Including Interstate Reduction	Amount to be Paid by Future Growth
Existing	$3,154,573	68.50%	6.28%	64.2%	$2,025,076
Within 10 Years	$4,228,381	68.50%	6.28%	64.2%	$2,714,406
Total	**$7,382,954**	**68.50%**	**6.28%**	**64.2%**	**$4,739,481**

**Percent of Fire / EMS calls expected to originate on the Interstate at buildout*

***The impact fee calculation will only consider those expenses which have occurred or will occur within 10 years*

The Stansbury Park Station

MANNER OF FINANCING

The District has funded the capital infrastructure for public safety through a combination of different revenue sources. Impact fees cannot reimburse costs funded through federal grants and other funds that the District has received for capital improvements without an obligation to repay. The amounts included in this calculation are those that have been funded by the existing residents and businesses through fees and taxes.

Additionally, the Impact Fees Act requires the Proportionate Share Analysis to demonstrate that impact fees paid by new development are an equitable method for funding growth-related infrastructure.

Existing users have funded and will continue to fund the share of costs proportionate to the number of existing calls to the number of build out calls. In other words, existing users will be responsible for their share of the system. Where excess capacity exists, the costs associated with that capacity will be fairly passed on to new growth.

Tax Revenues

Tax revenues in the form of property taxes are the primary source of revenue for the District. The District has authority to collect a portion of the assessed property taxes within its boundaries. This revenue is used to cover the operational expenses, non-impact fee qualifying capital expenses and other general needs of the North Tooele County Fire District.

Grants and Donations

Grants or donations that do not require repayment were considered in this analysis. If a grant or donation was used to acquire an asset, the value of that grant or donation was excluded from the impact fee calculation. This adheres to the policy of the Utah Impact Fees Act.

Other than the East Erda station land, the District does not anticipate receiving

Haz-Mat Training at the Stansbury Park Station

The Lake Point Station

any additional grants and donations. If grants and / or donations become available for constructing stations or acquiring other impact fee qualifying assets, they will be used and their value will be discounted from the impact fee calculation in future updates of this analysis.

Impact Fees

Impact fees have become an ideal mechanism for funding growth-related infrastructure and it is recommended that they be used in order to maintain an adequate level of service and prevent existing users from subsidizing the capital needs of new growth.

Impact fees are assessed in order to ensure that new development pays its fair share of the costs for both existing infrastructure with latent capacity as well as new infrastructure built for new residences and businesses.

As discussed earlier, increases to an existing level of service cannot be funded with impact fee revenues.

Dedications and Exactions

Developer exactions are not the same as grants or donations (which should be credited from the impact fee). Assets gained through developer exactions may be included in impact fee calculations.

If a developer constructs a fire station or dedicates land within the development as a "payment in lieu of funds," then the value of the dedication is credited against that particular developer's impact fee liability. From the District's perspective, this is the same as if the developer would have paid impact fees and those funds were used to purchase the station or land.

If the value of the dedication / exaction is less than the development's impact fee liability, the developer will owe the balance of the liability to the District. If the value of the improvements dedicated is worth more than the development's impact fee liability, the District must reimburse the difference to the developer from impact fee revenues collected from other developments.

Credits to Development

The Impact Fees Act requires that credits be granted to new development for future fees that will pay for growth-driven projects included in the Impact Fee Facilities Plan that would otherwise be paid for through user fees. Credits may also be granted to

developers who have constructed and donated facilities to the District in-lieu of impact fees.

This situation does not apply to developer exactions or improvements required to offset density or as a condition of development. Any project that a developer funds must be included in the Impact Fee Facilities Plan if a credit is to be issued.

If the situation arises that a developer chooses to construct facilities found in the Impact Fee Facilities Plan in-lieu of impact fees, appropriate arrangements must be made through negotiation between the developer, the County, and the District on a case by case basis.

The Erda Station

EQUITY OF IMPACT FEES

Impact fees are intended to recover the costs of capital infrastructure that relate to future growth. This method results in an equitable fee as future users will not be expected to fund any portion of the projects that will benefit existing residents. This method also addresses current deficiencies by assuming that facilities are sized optimally to cover the District without deficiencies or excesses at build out.

The impact fee calculations are structured for impact fees to fund 100% of the growth-related portion of facilities identified in the proportionate share analysis as presented in the impact fee analysis. Even so, there may be years that impact fee revenues cannot cover the annual growth-related expenses. Other revenues will be used to make up any annual deficits. Any borrowed funds are to be repaid in their entirety through impact fees collected at a later date.

The Pine Canyon Station

Chapter 7

APPARATUS FEE CALCULATION

Emergency vehicles are essential pieces of equipment that allow District staff to get to accidents, fires and medical emergencies quickly and perform their duty with the right tools. An emergency vehicle is a combination of a personnel carrier, tool box and sometimes water tanker. These components are essential to fighting fires and responding to a wide range of situations.

UTAH STATUTE ALLOWS FOR A SPECIAL FEE

As can be seen on the following page, emergency vehicles come in all shapes in sizes, with the ability to respond to several kinds of situations. Many of these vehicles are smaller and are accounted for as an operations and maintenance expense. As such, they are not allowed to be included in the impact fee calculation. However, the Utah Statute does allow a special fee to be assessed for certain types of large and expensive vehicles which—due to their long life and considerable cost—are classified as a capital expense.

Specifically, an apparatus costing over $500,000 when purchased and equipped can be assessed to non residential development on a square foot basis. This is consistent with the protocol determined by the Utah Impact Fees Act, where it states that only residential land uses may be exempt from an impact fee for fire suppression vehicles (Utah Code 11-36a-202(2)(a)(i)) and that these vehicles must be over $500,000 to be considered in the calculation (11-36a-102(16)(a)(ii)).

Although the District maintains multiple large vehicles, none in the inventory are currently valued at or over the threshold set by the Utah Impact Fees Act. Therefore, the cost of these vehicles are not included in the impact fee calculation for

Inventory of Qualifying Apparatus

Asset Description	Equipment	Purchase Year	PV Cost*	FV Cost**	Financing Costs	Impact Fee Qualifying Cost
Standard Chassis Engine	Fully Equipped	2018	$500,000	$563,858	$34,278	$598,136
Totals:			**$500,000**	**$563,858**	**$34,278**	**$598,136**

**General estimates from Ross Equipment Company Salt Lake City Office; Financing Costs are based on 5 year leases at a 2% interest rate*

***FV Costs are based on BLS 10 year average inflation rates*

Apparatus Impact Fee Calculation for Private Non Residential Development

Category	Value
Total Existing and Future Apparatus > $500,000	$598,136
Current Average Private Fire / EMS Calls*	438
Apparatus Cost per Call	$1,367
Fire / EMS Calls per kSF of Private Non Residential Development	0.028
Apparatus Cost per kSF of New Private Non Residential Development	**$38.55**

**Apparatus costs are divided by current average private calls due to shorter life span than fire stations*

2009 Pierce Pumper Fire Engine

1989 Pierce D8000 Pumper Fire Engine

2001 Pierce Pumper Fire Engine

1999 Dodge Pickup Wildland Brush Truck

1989 Ford FMC Pumper Fire Engine

1996 Dodge Pickup Wildland Brush Truck

1996 Freightliner Water Tender

2010 Ford Pickup Rescue Truck

1999 Chevy Suburban Rescue Truck

the District. However, the District does plan on adding one apparatus within ten years that will qualify. The details on this apparatus are contained in the first table on the previous page. Inflation and financing costs are included in the calculation of this future apparatus. For more information regarding the financing costs of the apparatus, see the appendix.

Using this information, an apparatus fee has been calculated which is only applicable to private non residential development in the District.

As can be seen in the second table on the previous page, the costs of the apparatus are divided by the current total private calls within the District. This average cost per call is then applied only to non residential land uses and multiplied by the calls per unit to arrive at the cost per unit. One unit of non residential land use is 1,000 square feet of building space.

Chapter 8

IMPACT FEE CALCULATION

In order to calculate a fair impact fee for each land use category, the first step is to determine what the capital facility costs of the District are per emergency call—now and over the next ten years (the appropriate future planning time frame as discussed in Chapter 4). The next step is to multiply the cost per call by the expected calls per unit for each type of land use. This will result in the final fee which is tailored to the specific land uses addressed in this analysis.

THE COST PER CALL

The table below presents the cost per call calculation in detail. The first column carries the title for each category considered. The second column displays the total costs or credits for each category. The first group titled "Existing Improvements" represents those expenses associated with existing facilities. The second group titled "Future Improvements" represents those expenses associated with facilities to be built within the next ten years (as discussed previously, only projects within this time frame are considered). Within the "Future Improvement" group there is a line for the

Fire & EMS Impact Fee Cost per Call

Expense	Impact Fee Qualifying Cost	% to Growth Including Interstate	Impact Fee Qualifying Cost Assigned to New Growth	Calls from Existing plus 10 year Project Growth	Cost per Call
Existing Improvements					
Existing Facilities	$3,154,573	64.19%	$2,025,076	952	$2,128.07
Total	**$3,154,573**		**$2,025,076**	**952**	**$2,128.07**
Future Improvements					
Future Facilities within 10 Years	$4,228,381	64.19%	$2,714,406	952	$2,852.46
Impact Fee Fund Balance *	-$78,537	100%	-$78,537	952	-$82.53
Total	**$4,149,844**		**$2,635,868**		**$2,769.93**
Studies					
Current Cost of Study	$4,510	100%	$4,510	952	$4.74
Studies to be Completed within	$6,000	100%	$6,000	952	$6.31
Total	**$10,510**		**$10,510**		**$11.04**
Grand Total	**$7,314,927**		**$4,671,454**		**$4,909.05**

Note: Minor discrepancies in this and other tables are due to rounding

**The Impact Fee Fund Balance has a positive balance but appears negative because it is subtracted from the total*

NTCFD firefighters rescue a trapped cat

"Impact Fee Fund Balance." This represents funds which have been collected recently through impact fees and have not yet been expended. This amount should be credited in this impact fee calculation since these funds have been allocated to fund future public safety infrastructure which is not yet built. Finally, the third group titled "Studies" represents the costs associated with performing this analysis and others planned within ten years.

The third column in the impact fee cost per call table displays the percentage of costs that can be applied to new growth. This percentage represents the amount of costs which can be attributed to new growth as discussed in Chapter 6. This percentage also includes the Interstate reduction discussed earlier in this report (the percentage of emergency calls which originate on the Interstate from non residents and are therefore not related to the impact of new growth within the District).

The result of multiplying the second column with the third column is the fourth column. This column is referred to as the "Impact Fee Qualifying Cost Assigned to New Growth." In other words, this is the total cost of existing or new infrastructure (built within ten years) for which new development will be responsible.

If this amount is divided by the number of private emergency calls that will be served by existing and ten year infrastructure (the fifth column), then the "Cost per Call" can be calculated (the sixth column).

THE FINAL IMPACT FEE

The final step in the impact fee calculation is for the cost per call to be allocated to each type of private development which the District has designated to be analyzed.

In the previous study, there were only two categories, residential and non

"Flippin Flapjacks with Firefighters" community service event

residential. In this study, residential development has been divided into two categories, single family and multi family. The purpose of this change is to allow for a fairer and more equitable assessment of impact fees.

The final impact fees for each land use category are contained in the first and second tables below. The third table contains the previous impact fee amounts as determined by a study performed in 1997.

Unique Projects

Occasionally a private project is constructed which has a unique impact on the community and does not easily fit into any of the major land use categories used in the previous tables to assess impact fees. In addition, a private project may fit into one of the land use categories listed above but may have an unusually high or low number of anticipated calls.

The District reserves the right under the Utah Impact Fees Act to assess an adjusted fee that more closely matches the true impact that a unique project may have upon fire and EMS and facilities and services.

To determine the impact fee for a non-standard use, the formulas presented in the second table below should be utilized. In order to estimate the number of annual calls to be created, where possible call data may be used from the District or from nearby locations that have a comparable project to the one being proposed.

MAXIMUM LEGAL IMPACT FEE

The District Administrative Control Board has the discretion to set the actual impact fees to be assessed, but they may not exceed the maximum allowable fee calculated in this impact fee analysis. The District may, on a case by case basis, work directly with a developer to adjust the standard impact fee to respond to unusual circumstances and ensure that impact fees are imposed fairly.

Recommended Fire & EMS Impact Fees Per Unit

FIRE / EMS	Cost per Call	Calls per Unit	Fee per Unit
Residential			
Single Family Residential Unit	$4,909.05	0.0837	$411.08
Multiple Family Residential Unit	$4,909.05	0.1139	$559.24
Non Residential			
Private Non Residential (kSF)	$4,909.05	0.0282	$138.47
Apparatus Fee for Private Non Residential (kSF) *	$1,366.65	0.0282	$38.55

Note: Minor discrepancies in this and other tables are due to rounding

**Apparatus Fee is charged to non residential only*

Non Standard Development Fire & EMS Impact Fee Calculation

FIRE / EMS Cost Per Call		Unique Project		Assessment
$4,909.05	x	# of Annual Calls Projected to be Created	=	Customized Impact Fee

Previous Fee from 1997 IFA

	Unadjusted Fee	Adjusted Fee*
Residential Unit	$835.94	$672.83
Non Residential Unit (kSF)	$557.29	$448.55

**The fee adjustment was based on a methodology which refunded building fee applicants based on averaged previous property taxes paid*

Chapter 9

IMPACT FEE CERTIFICATION

Zions has prepared this report in accordance with Utah Code Title 11 Chapter 36a (the "Impact Fees Act"), which prescribes the laws pertaining to Utah municipal capital facilities plans and impact fee analyses. The accuracy of this report relies upon the planning, engineering, and other source data which was provided by the District and their designees.

In accordance with Utah Code Annotated, 11-36a-306(2), Matthew Millis on behalf of Zions Bank Public Finance, makes the following certification:

I certify that the attached impact fee analysis:

1. Includes only the cost of public facilities that are:
    a. allowed under the Impact Fees Act; and
    b. actually incurred; or
    c. projected to be incurred or encumbered within six years after the day on which each
    d. impact fee is paid;
2. Does not include:
    a. costs of operation and maintenance of public facilities;
    b. cost of qualifying public facilities that will raise the level of service for the facilities, through impact fees, above the level of service that is supported by existing residents;
    c. an expense for overhead, unless the expense is calculated pursuant to a methodology
        i. that is consistent with generally accepted cost accounting practices and the methodological
        ii. standards set forth by the federal Office of Management and Budget for federal grant
        iii. reimbursement;
3. Offset costs with grants or other alternate sources of payment; and
4. Complies in each and every relevant respect with the Impact Fees Act.

Matthew Millis makes this certification with the following caveats:

1. All of the recommendations for implementations of the Impact Fee Facilities Plan (IFFP) made in the IFFP or in the impact fee analysis are followed in their entirety.
2. If all or a portion of the IFFP or impact fee analysis are modified or amended, this certification is no longer valid.
3. All information provided to Zions Bank Public Finance, its contractors or suppliers is assumed to be correct, complete and accurate. This includes information provided by the entity employing Zions Bank Public Finance for the completion of this study.

Matthew Millis, Vice President, Zions Bank Public Fiance

ZIONS BANK® PUBLIC FINANCE
MUNICIPAL CONSULTING

APPENDIX

TABLES AND DATA

The following tables and data were used to complete the previous analysis and also contain supplemental information.

A: Impact Fee

B: Impact Fee Components

C: Proportionate Share Analysis

D: Level of Service

E: Land Use

F: Emergency Call Summary

G: Emergency Call Details

H: Existing Facilities

I: Future Facilities

J: Construction and Land Costs

K: Debt Service Schedules

L: Apparatus Calculation

M: Interstate Freeway Impact Calculation

A: IMPACT FEE

Recommended Fire & EMS Impact Fees Per Unit

FIRE / EMS	Cost per Call	Calls per Unit	Fee per Unit
Residential			
Single Family Residential Unit	$4,909.05	0.0837	$411.08
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Note: Minor discrepancies in this and other tables are due to rounding

** Apparatus Fee is charged to non residential only*

Non Standard Development Fire & EMS Impact Fee Calculation

FIRE / EMS Cost Per Call		Unique Project		Assessment
$4,909.05	x	# of Annual Calls Projected to be Created	=	Customized Impact Fee

Previous Fee from 1997 IFA

	Unadjusted Fee	Adjusted Fee*
Residential Unit	$835.94	$672.83
Non Residential Unit (kSF)	$557.29	$448.55

**The fee adjustment was based on a methodology which refunded building fee applicants based on averaged previous property taxes paid*

1997 Impact Fee Calculations

FIRE / EMS	Cost per Call	Calls per Unit	Fee per Unit
Residential			
Residential Unit	$4,289.89	0.1568	$672.83
Non Residential (kSF Floor space)			
Private Non Residential	$4,289.89	0.1046	$448.55

B: IMPACT FEE COMPONENTS

Fire & EMS Impact Fee Cost per Call

Expense	Impact Fee Qualifying Cost	% to Growth Including Interstate Reduction	Impact Fee Qualifying Cost Assigned to New Growth	Calls from Existing plus 10 year Project Growth	Cost per Call
Existing Improvements					
Existing Facilities	$3,154,573	64.19%	$2,025,076	952	$2,128.07
Total	**$3,154,573**		**$2,025,076**	**952**	**$2,128.07**
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Total	**$10,510**		**$10,510**		**$11.04**
Grand Total	**$7,314,927**		**$4,671,454**		**$4,909.05**

Note: Minor discrepancies in this and other tables are due to rounding

** The Impact Fee Fund Balance has a positive balance but appears negative because it is subtracted from the total*

The cost of the existing fire stations is applied at 64.19% to growth, including a reduction for calls to the Interstate.

This percentage represents the proportion of the facilities (existing and future) for which new growth is responsible. The attributable cost is then divided by the calls from growth in order to

C: PROPORTIONATE SHARE ANALYSIS

Summary of Fire & EMS Facilities

Time Frame	Added Station Floorspace	% of Buildout Floor Space	Calls Served by this Infrastructure	Current Avg. Calls Served by this Infrastructure	Future Calls to be Added	% to Serve Future Growth
Existing	21,197	39.1%	814	438	376	46.2%
Within 10 Years	15,000	27.7%	576	0	576	100.0%
Beyond 10 Years	18,000	33.2%	691	0	691	100.0%
Existing and Within 10 Years	**36,197**	**66.8%**	**1,389**	**438**	**952**	**68.5%**
At Buildout	**54,197**	**100.0%**	**2,080**	**438**	**1,642**	**79.0%**

Proportionate Share of Fire & EMS Facilities

Time Frame*	Impact Fee Qualifying Cost of Facilities	% of Cost allocated to Future Development	Interstate Traffic Reduction**	% of Cost to Future Development Including Interstate Reduction	Amount to be Paid by Future Growth
Existing	$3,154,573	68.50%	6.28%	64.2%	$2,025,076
Within 10 Years	$4,228,381	68.50%	6.28%	64.2%	$2,714,406
Total	**$7,382,954**	**68.50%**	**6.28%**	**64.2%**	**$4,739,481**

**Percent of Fire / EMS calls expected to originate on the Interstate at buildout*

***The impact fee calculation will only consider those expenses which have occurred or will occur within 10 years*

D: LEVEL OF SERVICE

Level of Service based on Floor Space per Private Emergency Call

Time Frame	Floor Space Added	Total Floor Space	Total Private Calls to be Served*	SF per Call
Current	-	21,197	438	48.432
Within 10 Years	15,000	36,197	1,389	26.055
Beyond 10 Years	18,000	54,197	2,080	26.055

Current is based on current average served, all others are based on total capacity that will be served

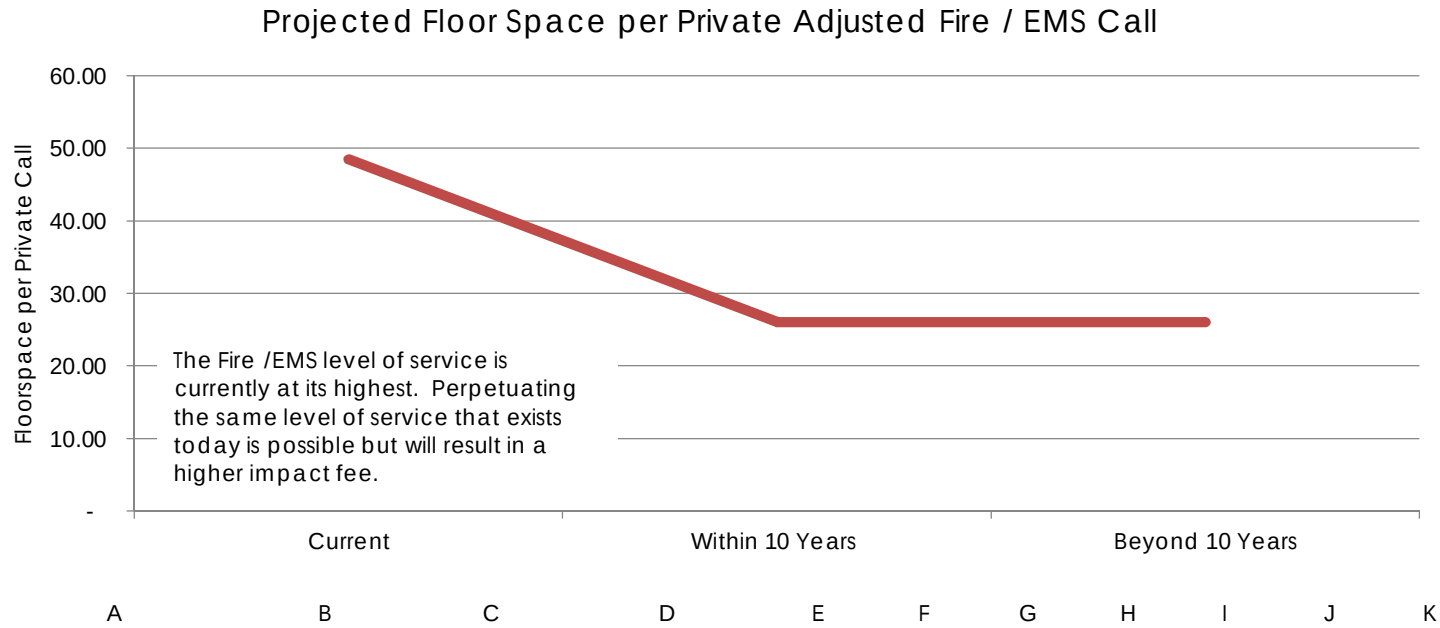
Floor Space Level of Service

The District's level of service ("LOS") is based primarily on floorspace. The District currently provides 48.432 SF of floorspace per private fire / EMS call. The future projects to be built within the next ten years and through buildout will provide a buildout level of service of 26.055 SF per private fire / EMS call. Because impact fees cannot be used to increase a level of service and because the level of service drops over time, the data demonstrates compliance with the Impact Fees Act in terms of a

Response Time Level of Service

The District's level of service ("LOS") is based partially on response time. The District's goal is to provide first responder services to 90% of its territory within four minutes. This is the NFPA 1710 national standard for emergency call response times--four minutes being a critical turning point in the size of a fire and also in effectiveness of medical response.

Factors affecting response time include the number of calls for service and the location of the incidents relative to a fire station. As development occurs, the number of calls for service will increase, creating pressure on the existing response system. Also, new development of residential and business areas tend to occur in areas farther removed from an existing station. The District intends to build its fire stations so that they are strategically located to provide a four



E: LAND USE

Land Use

	Existing Development		Future Development to be Added		Existing + Future	
Residential Units	Population	Units	Population	Units*	Population	Units
Single Family	13,374.8	3,984.6	37,579.7	13,831.6	50,954.4	17,816.2
Multi Family	1,011.6	301.4	6,631.7	2,371.1	7,643.3	2,672.5
Total	14,386.4	4,286.0	44,211.4	16,202.7	58,597.7	20,488.7
Non Residential Units	Estimated Acres	kSF	Estimated Acres	kSF**	Estimated Acres	kSF
Private Non Residential ^	567.0	2,469.9	1,742.5	7,590.2	2,309.5	10,060.1

Source: Tooele County Planning Department, North Tooele County Fire District, TCSO Dispatch , Tooele County Assessors, BEBR, US Census, and Zions Bank Public Finance GIS Analysis

**Future units are based on a GOPB 2060 Tooele County persons per household estimate of 2.86*

***It is estimated that non residential development will increase at a rate proportionate to the rate of increase seen in population growth*

^Private Non Residential = developed commercial, office, medical, retail, church buildings, industrial buildings, etc; the units are based on a Floor Area Ratio (FAR) of .1

Note: Again, minor discrepancies in this and other tables are due to rounding

Ratio of Residential in the District

Existing Residential		Future Residential	
Residential	**% of Total**	**Residential**	**% of Total**
Single Family	93.0%	Single Family	85.0%
Multi Family	7.0%	Multi Family	15.0%

Source: Tooele County Planning Department

Housing Units

	2010 Census	2010-12	Existing Total
Total Housing Units	3,963	323	4,286
Occupied Housing Units	3,751	306	4,056
% Single Family*	92.4%	99.4%	93.0%
% Multi Family	7.6%	0.6%	7.0%

Source: 2010 Census, 2011 ACS 5 Year Estimates, Utah Bureau of Economic and Business Research (BEBR), Zions Bank Public Finance

**Single Family = single family detached; all others are considered "Multi Family" for impact fee assessment purposes*

Housing Units + New Building Permits Issued from 2010 to 2012

	2010 Census Units	2010 Permits	2011 Permits	2012 Permits	Existing Total
Single Family	3,664	100	95	126	**3,985**
Multi Family	299	0	2	0	**301**
Permits + Housing Units		**100**	**97**	**126**	**4,286**

Source: Utah Bureau of Economic and Business Research (BEBR)

Note: It was assumed that all new permits issued in unincorporated Tooele County from 2010 to 2012 were in the NTCFD

Population, Historical and Projected

	2010	2013	2020	2030	2040	2050	2060
Census	13,302	14,386					
GOPB Projections			18,616	26,418	36,010	46,632	58,598

Source: US Census, Utah Governor's Office of Planning and Budget

Note: NTCFD population is based on the Erda and Stansbury Park Census Designated Place (CDP) and 80% of the "Miscellaneous" area of the County, as designated by the GOPB and Census

F: EMERGENCY CALL SUMMARY

Average Historic Calls per Unit to Private Development Types

Development Type	Average 2010 - 2012
Single Family	
Fire & EMS Calls	334
Units	3,985
Single Family Calls per Unit FIRE & EMS	**0.084**
Multi Family	
Fire & EMS Calls	34
Units	301
Multi-Family Residential Calls per Unit FIRE & EMS	**0.114**
Private Non Residential	
Fire & EMS Calls	70
Units (kSF)	2,470
Private Non Residential Calls per Unit FIRE & EMS	**0.028**

Source: Tooele County Sheriff's Office Dispatch , Tooele County Assessors, BEBR, US Census, and ZBPF GIS Analysis

Projected Future Private Fire & EMS Emergency Calls based on Future Units and Call Rate

Projected Future Private Fire / EMS Calls			
Development Type	**Future Units**	**Calls per Unit**	**Projected Future Calls***
Single Family (Units)	13,832	0.084	1,158
Multi Family (Units)	2,371	0.114	270
Private Non Residential (kSF)	7,590	0.028	214
Total Undeveloped Future Private Calls			**1,642**

** Projected Future Calls are based only on future units in addition to existing calls from existing units*

Existing and Future Private Fire & EMS Emgergency Calls

Existing and Future Private Fire / EMS Calls			
Development Type	**Existing (3 yr Avg)**	**Future**	**Existing + Future**
Single Family (Units)	334	1,158	1,492
Multi Family (Units)	34	270	304
Private Non Residential (kSF)	70	214	284
Total	**438**	**1,642**	**2,080**

G: EMERGENCY CALL DETAILS

Fire & EMS Calls responded to by the NTCFD from 2010 to 2012

Category	2010	2011	2012	3 yr Total	Average	% of Total
Single Family Residential	312	336	353	1001	334	40.9%
Multi-Family Residential	43	25	35	103	34	4.2%
Private Non Residential	62	50	97	209	70	8.5%
Traffic	104	97	120	321	107	13.1%
Public Land Uses	85	77	109	271	90	11.1%
Total within the District	**606**	**585**	**714**	**1905**	**635**	**77.9%**
Outside of the District	28	23	15	66	22	2.7%
Interstate *	140	149	186	475	158	19.4%
All Calls, All Areas	**774**	**757**	**915**	**2446**	**815**	**100.0%**

** Although the Interstate runs through the District, all emergency calls to the Interstate were accounted for separately*

H: EXISTING FACILITIES

Summary of Existing Fire & EMS Facilities

Existing Fire / EMS Facilities				
Location	**Year Constructed**	**Acres**	**SF of Space**	**Cost**
Lake Point Station	1994		4,752	$470,000
Lake Point Station Land		1.00	-	$12,139
Stansbury Park Station	2008		9,245	$2,140,941
Stansbury Park Station Land		1.08		$12,000
Pine Canyon Station	1991		2,200	$114,860
Pine Canyon Station Land *		1.10		$0
Erda Station	2003		5,000	$369,422
Erda Station Land		1.00		$35,211
Total		4.18	**21,197**	**$3,154,573**

** Pine Canyon Station land was a gift to the District and therefore cost $0*

I: FUTURE FACILITIES

Projection of Future Fire & EMS Facilities

Project	Construction Year	Floor Space (SF)	Land (Acres)	PV Project Expense $	Construction Year Expense*
Future Fire / EMS Facilities					
East Erda Station Land (Droubay Rd and Arrowhead Ln) **	2013	-	2.50	$0	$0
East Erda Station	2018	9,000	-	$1,507,500	$1,700,031
Lake Point Station Expansion	2020	6,000	-	$1,005,000	$1,189,174
West Stansbury Park Station Land	2024	-	2.00	$119,311	$155,425
West Stansbury Park Station	2025	9,000	-	$1,507,500	$2,011,574
Delle Station Land	2029	-	1.00	$59,656	$87,638
Delle Station	2030	9,000	-	$1,507,500	$2,268,483
Within 10 Years		15,000	2.50	$2,512,500	$2,889,205
Total Future Fire / EMS Facilities		33,000	5.50	$5,706,467	$7,412,324

** Construction year expenses are based on BLS 10 year average inflation rates (2002 to 2012)*

*** The land for the East Erda Station is in the process of being gifted to the District*

Sources of Anticipated Funding

Project	State or Federal	% Funded	Other Non Impact Fee Qualifying	% Funded	District	% Funded
Delle Station						
East Erda Station	-	0%	-	0%	$2,488,013	100%
Lake Point Station Expansion	-	0%	-	0%	$1,740,368	100%
Future Fire / EMS Facilities within 10 Years	-	0%	-	0%	$4,228,381	100%

** Future Bond Financing Costs were calculated using a 3.5% coupon and include a 4% cost of issuance*

Recommended Financing of Future Facilities to be Built within 10 Years

Project	Construction Year Expense	Future Bond Financing Costs*	Total	Impact Fee Qualifying
Future Fire / EMS Facilities				
East Erda Station	$1,700,031	$787,982	$2,488,013	$2,488,013
Lake Point Station Expansion	$1,189,174	$551,194	$1,740,368	$1,740,368
Future Fire / EMS Facilities within 10 Years	$2,889,205	$1,339,176	$4,228,381	$4,228,381

J: CONSTRUCTION AND LAND COSTS

Fire & EMS Station Cost Estimate

Fire Station, Face Brick Concrete Block Back-up / Bearing Walls	
Cost Estimate (Open Shop)	**Cost per SF**
SubTotal	$124.12
Contractor Fees (GC, Overhead, Profit)	31.00
Architectural Fees	12.38
User Fees	0.00
Total Building Cost	**$167.50**

Source: Based on 2012 RS Means CostWorks Data; Utah Region; 1-story 4,000 SF facility

Cost per Acre of Land Estimate

Address	Area	Acres	Sale Date	Sale Price	Price / Acre
1255 E SPRING CANYON RD	Erda	4.71	4/26/2013	124,900	$26,518
4570 ALAN LN	Erda	1.02	3/29/2013	77,000	75,490
3887 N ROSE SPRINGS RD	Erda	1.00	3/20/2013	76,216	76,216
3847 N ROSE SPRINGS RD	Erda	1.00	3/20/2013	89,900	89,900
25 N SAGE LN	Lake Point	5.08	12/22/2012	$200,000	39,370
7185 N RIDGE RD	Lake Point	1.00	12/18/2012	83,500	83,500
3176 N BRONZEWOOD CIR	Erda	4.70	7/25/2012	125,000	26,596
Average					**$59,656**

Source: Utah MLS, Local Realtor: George Snideman, Real Estate Broker

K: DEBT SERVICE SCHEDULES

East Erda Station

	Date	Principal	Coupon	Interest	Total P&I
	$1,768,032				
	North Tooele County Fire District				
	Series 2018 G.O. Bond				
	Estimated Debt Service Schedule				
	2019	62,520	3.50%	61,881	124,401
	2020	64,708	3.50%	59,693	124,401
	2021	66,972	3.50%	57,428	124,401
	2022	69,317	3.50%	55,084	124,401
	2023	71,743	3.50%	52,658	124,401
	2024	74,254	3.50%	50,147	124,401
	2025	76,852	3.50%	47,548	124,401
	2026	79,542	3.50%	44,858	124,401
	2027	82,326	3.50%	42,074	124,401
	2028	85,208	3.50%	39,193	124,401
	2029	88,190	3.50%	36,211	124,401
	2030	91,277	3.50%	33,124	124,401
	2031	94,471	3.50%	29,929	124,401
	2032	97,778	3.50%	26,623	124,401
	2033	101,200	3.50%	23,201	124,401
	2034	104,742	3.50%	19,659	124,401
	2035	108,408	3.50%	15,993	124,401
	2036	112,202	3.50%	12,198	124,401
	2037	116,129	3.50%	8,271	124,401
	2038	120,194	3.50%	4,207	124,401
	Total	**$1,768,032**		**$719,981**	**$2,488,013**

Note: Total principal amount is equal to the construction cost + 4% cost of issuance

Lake Point Station Expansion

	Date	Principal	Coupon	Interest	Total P&I
	$1,236,741				
	North Tooele County Fire District				
	Series 2020 G.O. Bond				
	Estimated Debt Service Schedule				
	2021	43,732	3.50%	43,286	87,018
	2022	45,263	3.50%	41,755	87,018
	2023	46,847	3.50%	40,171	87,018
	2024	48,487	3.50%	38,531	87,018
	2025	50,184	3.50%	36,834	87,018
	2026	51,940	3.50%	35,078	87,018
	2027	53,758	3.50%	33,260	87,018
	2028	55,640	3.50%	31,378	87,018
	2029	57,587	3.50%	29,431	87,018
	2030	59,603	3.50%	27,416	87,018
	2031	61,689	3.50%	25,329	87,018
	2032	63,848	3.50%	23,170	87,018
	2033	66,083	3.50%	20,936	87,018
	2034	68,396	3.50%	18,623	87,018
	2035	70,790	3.50%	16,229	87,018
	2036	73,267	3.50%	13,751	87,018
	2037	75,832	3.50%	11,187	87,018
	2038	78,486	3.50%	8,533	87,018
	2039	81,233	3.50%	5,786	87,018
	2040	84,076	3.50%	2,943	87,018
	Total	**$1,236,741**		**$503,627**	**$1,740,368**

Note: Total principal amount is equal to the construction cost + 4% cost of issuance

L: APPARATUS FEE CALCULATION

Inventory of Qualifying Apparatus

Asset Description	Equipment	Purchase Year	PV Cost*	FV Cost**	Financing Costs	Impact Fee Qualifying Cost
Standard Chassis Engine	Fully Equipped	2018	$500,000	$563,858	$34,278	$598,136
Totals:			**$500,000**	**$563,858**	**$34,278**	**$598,136**

**General estimates from Ross Equipment Company Salt Lake City Office; Financing Costs are based on 5 year leases at a 2% interest rate*

***FV Costs are based on BLS 10 year average inflation rates*

Apparatus Impact Fee Calculation for Private Non Residential Development

Category	Value
Total Existing and Future Apparatus > $500,000	$598,136
Current Average Private Fire / EMS Calls*	438
Apparatus Cost per Call	$1,367
Fire / EMS Calls per kSF of Private Non Residential Development	0.028
Apparatus Cost per kSF of New Private Non Residential Development	**$38.55**

**Apparatus costs are divided by current average private calls due to shorter life span than fire stations*

Apparatus costing over $500,000 when purchased and equipped can be assessed to non residential development on a square foot basis. Residential development cannot be assessed an apparatus fee. The costs of the apparatus are divided by the total calls within the service area, including residential, and industrial to calculate a fair average cost per call. This average cost per call is then multiplied by the calls per 1,000 square feet of floorspace for non residential land uses. The result is the fee that only non residential land uses can pay per 1,000 Sf of floorspace.

M: INTERSTATE FREEWAY IMPACT CALCULATION

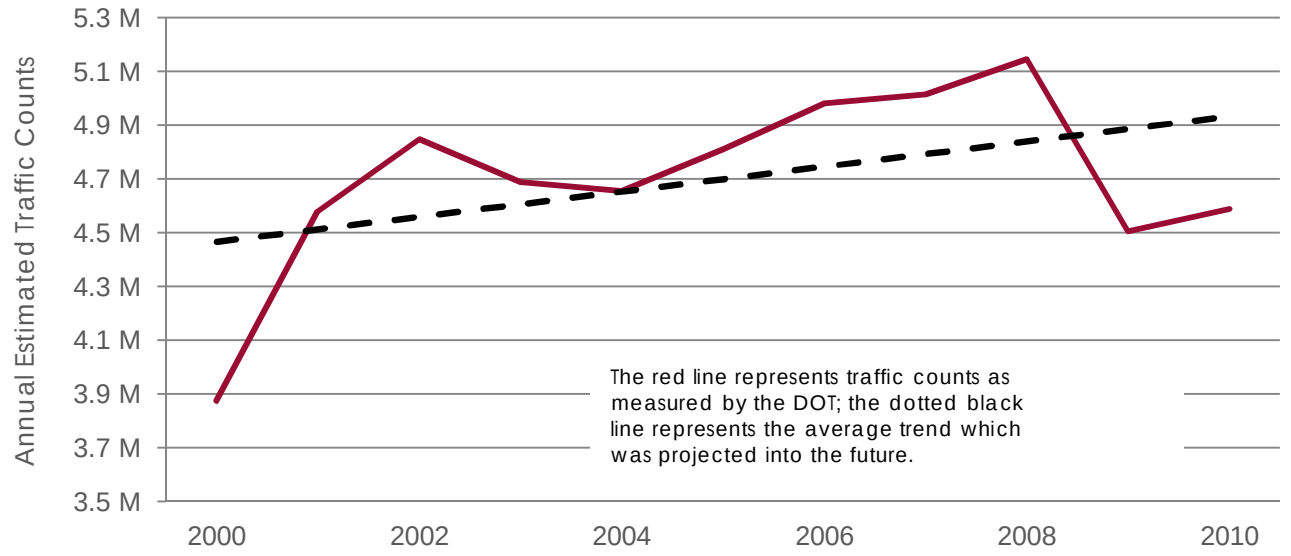
Interstate Freeway Impact Calculation

Fire & EMS	2010	2011	2012	3 Year Avg	2060*
Total Fire & EMS Calls to the Interstate	140	149	186	158	243
Total Fire & EMS Calls	774	757	915	815	3485
Total Annual Traffic Counts on the Interstate *	4.5 M	4.6 M	5.0 M	4.7 M	7.3 M
Total Interstate Traffic Counts per Call	32,185	30,792	26,776	29,918	29,918
% of Calls that Originate on the Interstate	18.09%	19.68%	20.33%	19.37%	6.98%
% of Calls that Originate on the Interstate Excluding NTCFD Residents **	**16.28%**	**17.71%**	**18.30%**	**17.43%**	**6.28%**

Source: Utah Department of Transportation (UDOT), GOPB, Zions Bank Public Finance

** 2011 and 2012 Traffic Counts were based on a trend extrapolated from 2000 to 2010 UDOT data*

*** It is estimated that District residents make up 10% of the Interstate traffic volume*



N: Census Data

Housing Units and Population

Location	Housing Units	HU Occupied	PPHU (Occupied)	Population	GOPB Projections					% in NTCFD
	2010	2010	2010	2010	2020	2030	2040	2050	2060	
Grantsville city, Utah	2,916	2,751	3	8,893	11,789	15,940	20,806	25,910	31,421	
Ophir town, Utah	35	18	2	38	41	45	51	56	61	
Rush Valley town, Utah	188	166	3	447	458	480	506	517	559	
Stockton town, Utah	237	216	3	616	768	978	1,201	1,407	1,606	
Tooele city, Utah	10,646	9,959	3	31,605	39,833	51,246	63,683	75,545	87,316	
Vernon town, Utah	89	79	3	243	255	254	322	389	458	
Wendover city, Utah	589	486	3	1,400	774	978	1,238	1,497	1,763	
Incorporated Total	**14,700**	**13,675**	**3**	**43,242**	**53,918**	**69,922**	**87,807**	**105,321**	**123,185**	
Dugway CDP, Utah	504	287	3	795	1,113	1,579	2,152	2,787	3,502	
Erda CDP, Utah	1,306	1,260	4	4,642	6,496	9,219	12,566	16,273	20,449	100%
Stansbury Park CDP, Utah	1,505	1,457	4	5,145	7,200	10,218	13,928	18,036	22,664	100%
Miscellaneous County	1,440	1,292	3	4,394	6,149	8,726	11,895	15,404	19,356	80%
NTCFD Total	3,963	3,751	4	13,302	18,616	26,418	36,010	46,632	58,598	
Unincorporated Total	**4,755**	**4,296**	**3**	**14,976**	**20,959**	**29,742**	**40,541**	**52,500**	**65,971**	
Tooele County Total	**19,455**	**17,971**	**3**	**58,218**	**74,877**	**99,664**	**128,348**	**157,821**	**189,156**	

Source: 2010 US Census, Utah Governor's Office of Planning and Budget, Zions Bank Public Finance

** The District Total incorporates the highlighted locations*

Single Family vs. Multi Family

Location	Total	Single Family		Multi Family		Multi Family Details								% in NTCFD
	All Types	1-unit, detached	%	All other	%	1-unit, attached	2 units	3 or 4 units	5 to 9 units	10 to 19 units	20+ units	Mobile home	Other	
Grantsville city, Utah	2,830	2,408	85.1%	422	14.9%	66	6	51	59	-	21	210	9	
Ophir town, Utah	29	29	100.0%	-	0.0%	-	-	-	-	-	-	-	-	
Rush Valley town, Utah	196	176	89.8%	20	10.2%	5	-	-	-	-	-	15	-	
Stockton town, Utah	203	185	91.1%	18	8.9%	-	2	-	-	-	-	16	-	
Tooele city, Utah	10,794	8,280	76.7%	2,514	23.3%	672	346	350	173	281	104	573	15	
Vernon town, Utah	87	69	79.3%	18	20.7%	-	-	-	-	-	-	18	-	
Wendover city, Utah	464	135	29.1%	329	70.9%	-	-	63	51	65	64	86	-	
Incorporated Total	**14,603**	**11,282**	**77.3%**	**3,321**	**22.7%**	**743**	**354**	**464**	**283**	**346**	**189**	**918**		
Dugway CDP, Utah	549	225	41.0%	324	59.0%	234	22	34	23	11	-	-	-	
Erda CDP, Utah	1,094	1,074	98.2%	20	1.8%	8	-	-	-	-	-	12	-	100%
Stansbury Park CDP, Utah	1,554	1,530	98.5%	24	1.5%	13	-	11	-	-	-	-	-	100%
Miscellaneous County	1,429	1,126	78.8%	303	21.2%	141	98	-	-	-	-	64	-	80%
NTCFD Total	3,791	3,505	92.4%	286	7.6%	134	78	11	-	-	-	63	-	
Unincorporated Total	**4,626**	**3,955**	**85.5%**	**671**	**14.5%**	**396**	**120**	**45**	**23**	**11**	**-**	**76**	**-**	
Tooele County, Utah	**19,229**	**15,237**	**79.2%**	**3,968**	**20.8%**	**1,139**	**474**	**509**	**306**	**357**	**189**	**994**		

Source: 2006 to 2011 5 Year American Community Survey, Zions Bank Public Finance

Note: For the purposes of this study all housing types except 1 unit detached are considered multi family

** The District Total incorporates the highlighted locations*

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